

Table of Contents

MCTC Areas of Study	iv
MCTC Awards, Degrees, Diplomas and Certificates	v
Important Information and Phone Numbers . . .	vii
2010–2011 Academic Calendar	viii

Getting Started

Admission to MCTC	2
Applying for Admission	2
Power of YOU	3
Declaring Your Major	3
Readmission	3
Transferring of credit to MCTC	3
Placement Testing	4
New Student Orientation	5

Paying for College

Tuition	8
Tuition Rates	8
Fees Included in Tuition	8
Course Fees	8
Registration Cancellation for Nonpayment	8
Payment Options	8
Tuition Refund and Waivers	9
Other College Costs	9
Reciprocity Agreements	9
Financial Aid	10
Four Easy Steps to Apply for Financial Aid	10
Applicants Without a High School Diploma or GED	10
How Financial Aid Is Determined	10
Grants	11
Work Study	11
Loans	11
Scholarships and Other Sponsored Funding	12

Registering for Classes

Registration Process	14
Multiple Sections Prohibited	14
Adding and Dropping Classes	14
Credit Load Limitations	14
Course Cancellations	14
Prerequisites	14
Taking a Class Pass/Fail	15
Auditing a Class	15
Repeating a Course	15
Withdrawing from a Class	15
Deadlines for Withdrawing	15
Procedure for Withdrawing	15
Attendance	15

Taking Classes

Academic Credits	18
Course Options	18
Online Courses	18
Service Learning and Project SHINE	18
Directed Study	18
Internships and Clinicals	18
Continuing Education and Customized Training	18
Evaluating Academic Performance	19
Class Syllabus	19
Grading System	19
Incomplete Grades	19
Final Exams	19
Cancellation of a Class Session	20

Earning an Award

MCTC Awards	22
Associate in Arts Degree	22
Associate in Fine Arts Degree	23
Associate in Science Degree	23
Associate in Applied Science Degree	23
Diploma	23
Certificate	23
General Education	24
Minnesota General Education Transfer Curriculum Competencies	24–26
Graduation Requirements	26
Credit-Earning Options	26
Intent to Graduate	26
Credits Earned at MCTC	26
Catalog Requirements	26

Student Records

Student Grade Reports and Transcripts	28
Deans' Honor List	28
Change of Address/Name	28
Emergency Student Contact	28
Residency Requirements	29

College Offices and Services

Student Services	32
Office of Student Affairs	32
Student Services Center	32
Admissions Office	32
Registrar's Office	32
Financial Aid Office	32
Business Services	32
Counseling and Advising Office	32
Resource and Referral Services	32
MCTC Campus Card	32
Power of YOU	32
Testing Center	32

continued on next page

Instructional Services	33
Office of Academic Affairs	33
Contacting Faculty	33
Library	33
College Computer Services	33
Bookstore	33
Educational Support Services	34
Advising Services	34
Counseling Services	34
International Student Services	34
Multicultural Student Services	34
Veterans Services Office	34
Veterans Welcome Center	34
Learning Center	34
Disability Services	35
Educational Opportunity Center	35
High School Upward Bound	35
Starting Point	35
Talent Search	36
Veterans Upward Bound	36
Women's Upward Bound	36
Career Development Services	36
Job Listings	36
Student Life	36
Campus Safety and Security	36
Parking	36
Housing	37
Insurance	37
Student Organizations	37
Clubs and Activities	37
Theatre Arts	37
Music Ensembles	37
Phi Theta Kappa (PTK)	38
Recreation and Leisure Activities	38
Student Ambassadors	38
Student Newspaper	38
Office of Student Life	38
Student Senate	38
Boynnton Health Service	38

Programs and Credentials

Articulation Agreements	40
Programs	42
Accounting	42
Addiction Counseling	44
Air Traffic Control	46
Aircraft Technician	47
American Indian Studies	50
Apparel Technologies	51
Architectural Technology	52
Barbering	53
Biology	54
Biotechnology	55

Business Management	56
Business Office Administration	58
Central Services Technician	61
Chemistry	62
Child Development	63
Cinema: Cinema Production	66
Cinema: Cinema Studies	68
Cinema: Cinematic Visual Effects	69
Cinema: Cinematography	71
Cinema: Digital Animation	73
Cinema: Directing and Producing	75
Cinema: Editing and Postproduction	77
Cinema: Screenwriting	79
Cinema: Sound for Cinema	81
Community Development	83
Community Health Worker	84
Computer Forensics	85
Computer Science	87
Computer Software Development	88
Computer Support and Network Administration	93
Construction Electricity	99
Criminal Justice Studies	100
Culinary Arts	101
Dental Assistant	103
Education	106
Electroneurodiagnostic Technology	108
Global Studies	110
Graphic Design: Print Media	111
Graphic Design: Web and Interactive Media	113
Healthcare Core Curriculum	115
Heating, Ventilation, Air Conditioning and Refrigeration	116
Homeland Security Specialist	118
Human Services	120
Law Enforcement	122
Legal Office Specialist	124
Library Information Technology	125
Machine Tool Technology	127
Mathematics	129
Media Production	131
Medical Office Assistant	134
Nursing	135
Nursing Assistant/Home Health Aide	138
Phlebotomy	139
Photography and Digital Imaging	140
Polysomnographic Technology	142
Restaurant Management	143
Sound Arts	144
Theatre Arts	146
Visual Arts	147
Welding and Metal Fabrication	148
Women's Studies	149

Course Descriptions

Academic Development	152
Accounting	152
Addiction Counseling	154
Air Traffic Control	155
Aircraft Technician	157
American Indian Studies	159
American Sign Language	160
American Studies	160
Anthropology	161
Apparel Technologies	161
Arabic	163
Architectural Technology	163
Area, Cultural and Ethnic Studies	166
Art	168
Astronomy	170
Barbering	170
Biology	172
Biotechnology	174
Business Management	175
Business Office Technology	178
Central Services Technician	180
Chemistry	181
Child Development	184
Chinese	187
Cinema Courses	187
Community Health Worker	192
Computer Literacy	193
Computer Science	193
Construction Electricity	195
Culinary Arts	197
Dental Assistant	199
Economics	201
Education	201
Electroneurodiagnostic Technology	204
English	206
English as a Second Language	210
French	211
Geography	212
Geology	212
Global Health and Healing Arts	213
Graphic Design: Print Media	214
Graphic Design: Web and Interactive Media	217
Health	218
Healthcare Core Curriculum	220
Heating, Ventilation, Air Conditioning and Refrigeration	221
History	224
Homeland Security Specialist	227
Honors	228
Human Services	229
Information Studies	231
Information Technology	231

Japanese	239
Journalism	239
Law Enforcement	240
Library Information Technology	240
Machine Tool Technology	241
Mathematics	244
Media Production	247
Music	249
Nursing	251
Nursing Assistant/Home Health Aide	254
Philosophy	255
Phlebotomy	256
Photography	256
Photography and Digital Imaging	257
Physical Education	260
Physics	263
Political Science	264
Polysomnographic Technology	266
Psychology	268
Reading	269
Restaurant Management	270
Sociology	270
Sound Arts	271
Spanish	273
Speech Communication	274
Study Skills	275
Theatre Arts	276
Welding and Metal Fabrication	279
Women's Studies	280

Appendix

Appendix	283
--------------------	-----

Index

Index	285
-----------------	-----

MCTC Areas of Study

Aviation Careers

Air Traffic Control	46
Aircraft Technician	47

Business Careers

Accounting	42
Business Management	56
Business Office Administration	58
Legal Office Specialist	124

Health Careers

Addiction Counseling	44
Central Services Technician	61
Community Health Worker	84
Dental Assistant	103
Electroneurodiagnostic Technology	108
Healthcare Core Curriculum	115
Medical Office Assistant	134
Nursing	135
Nursing Assistant/Home Health Aide	138
Phlebotomy	139
Polysomnographic Technology	142

Information Technology Careers

Computer Forensics	85
Computer Software Development	88
Computer Support and Network Administration	93
Library Information Technology	125

Public Safety Careers

Criminal Justice Studies	100
Homeland Security Specialist	118
Law Enforcement	122

Liberal Arts

American Indian Studies	50
Biology	54
Biotechnology	55
Chemistry	62
Computer Science	87
Global Studies	110
Mathematics	129
Theatre Arts	146
Visual Arts	147
Women's Studies	149

Manufacturing and Applied Technology Careers

Architectural Technology	52
Construction Electricity	99
Heating, Ventilation, Air Conditioning and Refrigeration	116
Machine Tool Technology	127
Welding and Metal Fabrication	148

Media Arts

Cinema: Cinema Production	66
Cinema: Cinema Studies	68
Cinema: Cinematic Visual Effects	69
Cinema: Cinematography	71
Cinema: Digital Animation	73
Cinema: Directing and Producing	75
Cinema: Editing and Postproduction	77
Cinema: Screenwriting	79
Cinema: Sound for Cinema	81
Graphic Design: Print Media	111
Graphic Design: Web and Interactive Media	113
Media Production	131
Photography and Digital Imaging	140
Sound Arts	144

Public Service Careers

Child Development	63
Education	106
Human Services	120

Service Industry Careers

Apparel Technologies	51
Barbering	53
Culinary Arts	101
Restaurant Management	143

MCTC Awards

Degrees, Diplomas and Certificates

Accounting Clerk Certificate	43	Culinary Arts A.A.S. Degree	101
Accounting Technician A.A.S. Degree	42	Culinary Arts Certificate	102
Accounts Payable/Receivable Certificate	43	Culinary Arts Diploma	101
Addiction Counseling A.S. Degree	44	Culinary Certificate in Baking	102
Addiction Counseling Diploma	45	Database Administrator Certificate	97
Administrative Assistant/Software Support Diploma	59	Database Specialist Certificate	91
Administrative Assistant/Software Support Specialist A.A.S. Degree	58	Dental Assistant Diploma	104
Air Traffic Control A.A.S. Degree	46	Dental Assistant Expanded Functions Certificate	105
Aircraft General Certificate	48	Dental Office Support Personnel Certificate	104
Aircraft Powerplant Certificate	48	Digital Video Certificate	132
Aircraft Structures Certificate	49	Dynamic Digital Media A.A.S. Degree	131
Aircraft Systems Certificate	48	Education A.S. Degree	106
American Indian Studies Certificate	50	Electroneurodiagnostic Technology Diploma	108
Apparel Technologies Advanced Certificate	51	Electroneurodiagnostic Technology A.A.S. Degree	108
Apparel Technologies Diploma	51	ESOL Education Certificate	107
Architectural Technology Diploma	52	Global Studies Certificate	110
Aviation Airframe Technician A.A.S. Degree	48	Graphic Design Core Certificate	112
Aviation Powerplant Technician A.A.S. Degree	47	Graphic Design: Print Media A.A.S. Degree	111
Banking and Finance Certificate	57	Graphic Design: Print Media Certificate	112
Banking and Finance Concentration A.S. Degree	57	Graphic Design: Web and Interactive Media A.A.S. Degree	114
Barbering Diploma	53	Graphic Design: Web and Interactive Media Core Certificate	114
Biology A.S. Degree	54	Graphic Design: Web and Interactive Media Certificate	114
Biotechnology A.S. Degree	55	Heating, Ventilation, Air Conditioning and Refrigeration A.A.S. Degree	116
Business Management A.S. Degree	56	Heating, Ventilation, Air Conditioning and Refrigeration Diploma	117
Central Services Technician Certificate	61	Heating, Ventilation, Air Conditioning and Refrigeration Installation Certificate	117
Chemistry A.S. Degree	62	Homeland Security Specialist A.A.S. Degree	119
Child Development A.A.S. Degree	64	Homeland Security Basic Certificate	119
Child Development A.S. Degree	64	Homeland Security Emergency Management Certificate	119
Child Development Certificate	65	Homeland Security Planning Certificate	119
Child Development Diploma	65	Human Services A.S. Degree	120
Cinema: Cinema Production Certificate	66	Human Services Diploma	121
Cinema: Cinema Studies Certificate	68	Information Assurance Professional Diploma	95
Cinema: Cinematic Visual Effects Certificate	70	Information Technology Fundamentals Certificate	98
Cinema: Cinematography A.S. Degree	72	Interactive Media Diploma	132
Cinema: Digital Animation Certificate	74	JAVA Developer Certificate	89
Cinema: Directing and Producing A.S. Degree	76	Law Enforcement A.S. Degree	123
Cinema: Editing and Postproduction A.S. Degree	78	Legal Office Specialist Certificate	60, 124
Cinema: Screenwriting A.S. Degree	80	Library Information Technology A.S. Degree	126
Cinema: Sound for Cinema Certificate	82	Linux Network Administrator Certificate	96
Cisco Network Administrator Certificate	96	Machine Tool Technology Diploma	127
Community Development A.S. Degree	83	Macintosh Support and Network Administration Certificate	98
Community Health Worker Certificate	84	Mathematics A.S. Degree	129
Computer Forensics A.A.S. Degree	85	Medical Office Assistant Diploma	134
Computer Graphic Imaging Diploma	132		
Computer Security Specialist Certificate	96		
Computer Support and Network Administration A.A.S. Degree	94		
Computer Support and Network Administration Diploma	94		
Construction Electricity Diploma	99		
Criminal Justice Studies A.S. Degree	100		

continued on next page

Microsoft Network Administrator Certificate	97
Mobile Application Developer Certificate.	92
Nursing Assistant/Home Health Aide Certificate	138
Nursing Assistant/Home Health Aide Extended-Hour Certificate.	138
Nursing Mobility Program A.S. Degree	136, 137
Office Information Processing Specialist A.A.S. Degree . . .	59
Open Source Developer Certificate	92
Payroll Accounting Certificate	43
Phlebotomy Certificate	139
Photography and Digital Imaging A.A.S. Degree	140
Photography and Digital Imaging Diploma	141
Photography and Digital Imaging Certificate.	141
Polysomnographic Technology A.A.S. Degree	142
Practical Nursing Program Diploma	136
Public Information Services Certificate.	126
Restaurant Management A.A.S. Degree.	143
Restaurant Management Diploma.	143
Software Developer Diploma.	89
Software Development A.A.S. Degree	88
Sound Arts A.S. Degree	145
Sound for Media Certificate	133
Special Education Certificate.	107
Technical Information Services Certificate.	126
Theatre Arts A.F.A. Degree.	146
Visual Arts A.F.A. Degree.	147
Visual BASIC .NET Developer Certificate	90
Visual C# Developer Certificate	90
Web Developer Certificate.	91
Welding and Metal Fabrication Certificate.	148
Wireless Network Administrator Certificate.	97
Women's Studies Certificate	149

Important Information

Accreditation

Minneapolis Community and Technical College (MCTC) is accredited by The Higher Learning Commission and is a member of the North Central Association (30 N. LaSalle St., Suite 2400; Chicago, IL 60602-2504; 312-263-0456; www.ncahigherlearningcommission.org).

MCTC is also approved by the U.S. Office of Education for participation in federal programs, by the U.S. Department of Immigration for international students, and by the Minnesota State Approving Agency for Veterans' Educational Benefits. The Nursing program is approved by the Minnesota Board of Nursing and accredited by the National League of Nursing Accrediting Commission. The Law Enforcement program is accredited by the Minnesota Board of Peace Officer Standards and Training. The Dental Assistant program is accredited by the Commission on Dental Accreditation of the American Dental Association. The Aviation Technician program is accredited by the Federal Aviation Administration (FAA). The Electroneurodiagnostic Technology and Polysomnographic Technology Programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Security and Compliance Reports

State and federal governments require that colleges inform prospective students of various policies and security information. If you wish to receive information about these reports, including the campus security report, crime statistics, procedures for reporting crime and emergencies, campus public safety efforts and programs, drug and alcohol-free schools policy, equity in athletics disclosure information, the discrimination/harassment reporting process, the student code of conduct, notification of student rights under FERPA, voter registration information, MCTC graduation rates as reported in the Student Right to Know, and the withdrawing from classes and Refund Policy, please go to the college website at www.minneapolis.edu. Select any heading under "MCTC Main Menu," then select "Compliance and Security Reports." If you do not have access to the Web, you may request a printed copy of these reports by contacting the Public Safety Office at Minneapolis Community and Technical College, 1501 Hennepin Ave., Minneapolis, MN 55403 or by calling 612-659-6910.

Disability Services

If you need assistance to access college programs, services or activities, contact Disability Services at 612-659-6730 (voice) or 612-659-6731 (TTY).

Equal Opportunity Statement

Minneapolis Community and Technical College (MCTC) will not discriminate against any person because of race, color, creed, religion, national origin, gender, disability, age, marital status, sexual orientation or status with regard to public assistance. MCTC is an equal opportunity educator and employer, and a member of the Minnesota State Colleges and Universities system.

Information in this brochure can be made available in alternate format on request by calling 612-659-6730 (voice) or 612-659-6731 (TTY). TTY numbers are listed when available. Please contact Minnesota Relay Service at 711 to contact offices where the TTY number is not listed.

Important Phone Numbers

General Information.....	612-659-6000
Toll Free	1-800-247-0911
Academic Affairs	612-659-6100
Admissions	612-659-6200
Aviation Center.....	952-826-2400
Bookstore.....	612-659-6850
Business Services	612-659-6880
Center for Criminal Justice and Law Enforcement.....	651-999-7600
City College News.....	612-659-6796
Computer Lab	612-659-6000 x4604
Continuing Education and Training.....	612-659-6500
Counseling and Advising	612-659-6700
Disability Services (voice)	612-659-6730
(TTY)	612-659-6731
Educational Opportunity Center.....	612-659-6543
Financial Aid	612-659-6240
High School Upward Bound.....	612-659-6555
Human Resources	612-659-6840
Judicial Affairs	612-659-6712
Learning Center	612-659-6140
Legal Affairs.....	612-659-6319
Library	612-659-6290
Multicultural Student Services.....	612-659-6700
President's Office (voice)	612-659-6300
Public Safety.....	612-659-6910
Public Safety: Emergency Only.....	612-659-6900
Registrar.....	612-659-6250
Service Learning.....	612-659-6114
Starting Point	612-659-6565
Student Life	612-659-6761
Student Senate	612-659-6799
Talent Search.....	612-659-6568
Testing Center.....	612-659-6262
Veterans Upward Bound.....	612-659-6579 or 612-659-6580

2010–2011 Academic Calendar

Fall Semester 2010

Fall semester begins	Aug. 23
Holiday/campus closed	Sep. 6
Faculty development days (no classes)	Oct. 21–23
Holiday/campus closed	Nov. 11
Holiday/campus closed	Nov. 25–27
Final exams	Dec. 13–17
Last day of fall semester	Dec. 17

Spring Semester 2011

Spring semester begins	Jan. 10
Holiday/campus closed	Jan. 17
Holiday/campus closed	Feb. 21
Student Success Day	Feb. 24
Faculty Development Day (no classes)	Feb. 25
Spring break	March 14–19
Final exams	May 5–11
Last day of spring semester	May 11

Summer Term 2011

Summer term begins	May 31
Holiday/campus closed	July 4
Last day of summer term	July 25



Getting Started

Admission to MCTC

Applying for Admission

Application Deadlines

Applications for general admission to the College are accepted year-round. Applicants seeking to apply for admission after the start of the term to enroll in late-start courses or courses on an alternate calendar should contact the Admissions Office. Early application to the College is strongly encouraged, as it permits better program planning, access to advising and counseling services, and timely access to financial aid. The Admissions Office recommends applying at least six to eight weeks prior to the start of a term. Refer to the Prospective Students section of the College website for important dates and deadlines regarding admission.

Admission to Career Programs

General admission to MCTC does not guarantee acceptance into a specific career/technical program. Applicants to programs with waitlists will be notified of their admission status to the specific career/technical program. Additional admission requirements and application deadlines apply to the following: International Student Admission, Air Traffic Control, Law Enforcement, Postsecondary Education Option (PSEO), Power of YOU, Nursing, Cinema Production, Cinematography, Directing and Producing, Editing and Postproduction, and Screenwriting. Contact the Admissions Office (Student Services Center, T.2200) or refer to the College website for additional information regarding admission requirements for these programs.

See MCTC Policy 4.01.

General Admission for Award-Seeking Applicants

1. Apply for admission online at www.minneapolis.edu/applynow and pay the \$20 application fee. If you previously attended Minneapolis Community College or Minneapolis Technical College and paid an application fee, you do not have to pay it again. If you need assistance or access to a computer, you may apply in person at the Student Services Center, T.2200.

Metropolitan State University students co-enrolling at MCTC do not need to submit an application fee if they have already paid the Metropolitan State application fee.

2. Take placement tests. Check the Testing website for study guides and testing times, www.minneapolis.edu/testing, or call the Testing Center Information Line, at 612-659-6262. Students who are transferring from another college or university should check the College website or contact the Admissions Office for information about transferring test scores and/or exemptions from testing based on completed coursework. Students with disabilities who need testing accommodations should

contact Disability Services at 612-659-6730 before attending a placement testing or orientation session.

3. Attend a New Student Orientation session.

Orientation information is provided at placement testing. Transfer students complete the orientation requirement by meeting with an Admission Advisor.

Admission Process for Transfer Students

If you have attended a U.S.-accredited college or university previously and are in good academic standing with a GPA of 2.0 or higher, you may be eligible to apply for admission to MCTC as a transfer student. Please follow the steps under "General Admission for Award-Seeking Applicants." Refer to the Transfer Student applicant steps at www.minneapolis.edu/applynow for further information regarding transfer to the College or contact the Admissions Office. Applicants seeking financial aid, transfer of credit and/or veterans' benefits are required to submit official college transcripts from all prior colleges attended regardless of grades or academic standing. Students who have attended a college or university previously should submit an official copy of their transcript(s) to the Registrar's Office at the time of application. Students should also have unofficial copies of their transcripts available for advising, financial aid and prerequisite screening.

MCTC reserves the right to review and place conditions on enrollment for transfer students who are on suspension at their previous college(s).

Non-Award-Seeking Students

Non-degree, -diploma, or -certificate-seeking students complete the same admission process as regular students but may register for classes without attending a college orientation session. Non-degree, -diploma, or -certificate-seeking students are not eligible for financial aid and may not take courses with placement or program admission requirements unless they have completed the placement exemption process. Students who have earned a bachelor's degree or an associate in arts (A.A.) or associate in science (A.S.) degree should submit a copy of their transcript to the Admissions Office (T.2200) for possible exemption from the reading, writing and/or math placement. Students who have attended a college or university previously should submit an official copy of their transcript(s) to the Registrar's Office at the time of application. Students should also have unofficial copies of their transcripts available for advising, financial aid and prerequisite screening.

Non-High School/GED Graduates

People who do not have a high school diploma or GED may still be admitted to the college if they can demonstrate potential for being a successful college student. Prospective students must complete the steps for admission under "Ability to Benefit Applicant" and then meet with the director of admission after completion of the placement test to determine admission to the College. Refer to www.minneapolis.edu/applynow/abilitytobenefit for admission steps and information.

Postsecondary High School Applicants

The Postsecondary Education Option (PSEO) program offers Minnesota junior and senior high school students the opportunity to take college-level courses to meet high school graduation requirements, as well as begin their college career.

Refer to the College website at <http://www.minneapolis.edu/prospectivestudents/pseoapplicant.cfm> for admission requirements, deadlines and application materials or contact the K-12 Connections office 612-659-6773 for further information.

Power of YOU

Students who have graduated from a Minneapolis or Saint Paul public high school in spring 2011 and who are residents of either Minneapolis or Saint Paul, may be eligible to participate in the tuition-free **Power of YOU** program for fall 2011. Refer to the Power of YOU website at <http://powerofyou.minneapolis.edu> for information regarding admission requirements, application materials and deadlines, or contact the Power of YOU office at 612-659-6727.

International Nonimmigrant Visa Holders

International students are those who do not have U.S. citizenship, permanent residency, refugee or political asylee status. International students must complete the College's International Student Admissions process—including the special application—by the published deadline. They also must meet the English language, academic and financial requirements. MCTC issues the Form I-20 for the F-1 student visa. International students admitted to the College are required to carry health insurance, including provisions for medical evacuation and repatriation as a condition of enrollment at MCTC. MCTC is not responsible for any student's bills due to illness or injury. Refer to the "International Applicant" steps at www.minneapolis.edu/applynow for minimum admission requirements, documentation needed, application forms, deadlines and other information regarding international student admission.

MCTC does not provide on-campus housing. Students are responsible for arranging their own housing accommodations.

Senior Citizen Applicants

Senior citizens who are Minnesota residents and 62 years of age or older may register for full-term credit courses on a space-available basis, beginning the second day of the course. Senior citizen tuition is \$32.06 per semester credit, plus any special fees. Senior citizens who are Minnesota residents may audit an MCTC course at no charge on a space-available basis (go to www.minneapolis.edu/paytuition for more details). Senior citizens who wish to register for a short-term credit course (13 weeks or less), may register on a space-available basis beginning on the second day of the course. An MCTC application form and a one-time \$20 application fee must be submitted to the Admissions Office before registering for classes. Senior citizens who register

before the second day of a full-term course or register before a short-term course (13 weeks or less) begins are required to pay full tuition.

Declaring Your Major

Award-seeking students must declare a major on their admission application. In order to be enrolled in a career program, a student's academic record and placement results must meet the program's requirements.

To change their major, students must complete the Change of Major form available in the Student Services Center (T.2200) or online at <http://www.minneapolis.edu/pdfs/changeofmajor.pdf>. Changing your major does not guarantee your enrollment in a career program.

Readmission

All students who have been away from the College for one term or longer must complete the Returning Student admission process (www.minneapolis.edu/applynow) in order to be readmitted and enroll in the College. A student must comply with the program requirements in effect when returning to the College. Reacceptance into a technical program is contingent upon review of the student's application file, academic status and space availability in the technical program major. Returning students must verify that their placement scores are current. If students' placement scores are no longer valid or they have not completed the necessary prerequisites, they may be required to complete the College's placement test. Name changes must be submitted with proper legal documentation. Returning students that have a hold or suspension on their academic record may be required to complete additional steps before they become eligible to enroll in classes.

Transferring of Credit to MCTC

General Procedures

Transfer students pursuing a certificate, diploma, A.A., A.F.A., A.S. or A.A.S. degree, must complete the admission process for transfer students and have official transcripts of all previously attended U.S. colleges and vocational schools sent to the Registrar's Office. After transcripts are evaluated, the number of credits accepted will be recorded on the student's transcript, and the MCTC course equivalencies will be recorded on the student's Degree Audit Report (DARS). See policy 3.02 part 4.

College transcripts from outside of the United States must be submitted to an evaluating service (forms are available in the Registrar's Office). The transcript evaluation submitted to the Registrar's Office must be an original or be submitted directly from the evaluation service. If the official document is not in English, the document must be translated into English by the evaluation agency, or a certified, literal translation must be provided.

Transfer Credit Review Procedure

Questions about the rationale behind acceptance/application of specific courses should be discussed first with the Registrar's Office.

Steps for Transfer Credit Appeal

1. Discuss the evaluation with the credit transfer evaluator in the Registrar's Office.
2. Fill out an appeal form and send it to the vice president of academic and student affairs for review of coursework. The Registrar's Office supplies the form. Students are responsible for including supplemental information, a course description from the transfer college's catalog and syllabi for the course(s) in question.
3. A written response to the appeal will be sent to the student and the Registrar's Office. Appeals will be processed within a reasonable time (usually six working days). The Vice President's Office will mail the student a copy of the decision.
4. If a student is not satisfied with the College's transfer appeal decision, the student may submit a request to the Minnesota State Colleges and Universities' senior vice chancellor of academic and student affairs for a system-level appeal of the College's transfer appeal decision. Contact information for the senior vice chancellor is available in the Registrar's Office. The decision of the senior vice chancellor shall be binding on all college and university parties.

Placement Testing

New Student Placement

Minnesota State Colleges and Universities (MnSCU) support student success. MnSCU Board Policy 3.3 requires placement testing in the areas of reading, writing and math. English-as-a-second language (ESL) students are also assessed in listening. Placements received from this testing are mandatory; therefore, it is necessary for students to take these tests seriously and prepare for them. Practice tests can be found on the MCTC website. Results are also used to help determine if a student is ready to enroll in coursework. Per MnSCU Policy and Procedures, math placement scores used to satisfy course prerequisites are only valid for two calendar years, inclusive of the current calendar year. All other placement scores are valid for three calendar years, inclusive of the current calendar year. A calendar year is Jan. 1 through Dec. 31.

If scores indicate that a student should be placed in a precollege level course in reading, writing, ESOL, or math, he or she will be required to enroll and demonstrate proficiency in that course before registering for the next level course.

Students who place into developmental reading courses need to begin these courses the first semester of enrollment, as many college courses require reading prerequisites.

All new students who are seeking a certificate, diploma or degree are required to take the placement tests prior to attending an Orientation session and registering for classes (see information on exemptions). Students should complete an application form for admission to MCTC prior to testing as an MCTC ID number is required for placement testing. A student's course enrollment may be cancelled if the student does not enroll in the required courses.

Test results may affect entry to MCTC for those students unable to provide a high school transcript stating a date of graduation or proof of successful completion of a GED. Contact the Admissions Office for further information.

Placement test dates and times are available in the Student Services Center, Counseling and Advising Office, Testing Center and on MCTC's website at www.minneapolis.edu/testing. Click on "Prospective Students" and follow the links to placement testing.

See MCTC Policy 4.02.

Placement Appeals Process

Students who believe that the results obtained after testing do not accurately reflect their skills may request a retest. A student may retest once during a testing term. A student is limited to taking the test a total of three times within 12 months. Once a student begins coursework in the area tested, no further testing is permitted. Advancement through a curriculum is determined by performance in enrolled coursework. See MCTC Policy 4.02.

Adult Basic Education

The Minneapolis Adult Literacy Program offers free Adult Basic Education (ABE) courses on the MCTC campus in ESL and math to help students brush up on basic skills before enrolling in credit classes at the College. The placement tests will determine those qualified to enroll in these free classes.

Students with Disabilities

Students with disabilities may request special arrangements for testing. Contact Disability Services before taking the assessment tests. See MCTC Policy 4.02.

Placement Exemptions

The general policy for exemption from placement testing is listed below. See MCTC Policy 4.02.

- Students transferring from another MnSCU institution need to transfer their placement scores to the Admissions Office or the Testing Center. MCTC will accept scores only on MnSCU-endorsed tests: Accuplacer and Accuplacer ESL. Per MnSCU Policy and Procedures, math placement scores used to satisfy course prerequisites are only valid for two calendar years, inclusive of the current calendar year. All other placement scores are valid for three calendar years, inclusive of the current calendar year.

- All students must meet the course prerequisites for registration. Information regarding prerequisites can be found in the course-listing section of term schedules. (Note: Students indicating that they are not seeking a degree, diploma or certificate are not eligible for financial aid.)
- Transfer students or students holding degrees may be exempt from testing based on completed coursework. To have their transcripts evaluated, students must bring an unofficial copy of their transcript to the Counseling and Advising Office or Student Services Center to establish exemption status. A copy of the decision regarding their exemption status will be mailed to them. All students must meet the prerequisites for the course in which they enroll.
- A student may be exempt from taking the math portion of the placement test if a transcript shows completion of a college-level algebra course(s) with a grade of "C" or higher.
- A student may be exempt from taking the writing portion of the placement test if a transcript shows completion of a standard freshman English composition course with a grade of "C" or higher.
- A student may be exempt from taking the reading portion of the placement test if a transcript shows completion of at least 15 semester credits of reading-intensive coursework with an overall GPA of 2.0 or above.
- A student may be exempt from testing based on documented ACT subject area scores of 24 or better in reading, English and math. Math subject area scores are valid for two calendar years, inclusive of the current calendar year. Reading and English subject area scores are valid for three calendar years, inclusive of the current calendar year. MCTC does not use the composite ACT score to determine testing-exemption status.

New Student Orientation

New students who have completed the admission process and taken the placement tests will be scheduled for a New Student Orientation session. During Orientation, counselors and advisors will meet with students to assist them in selecting appropriate courses. At Orientation, students will be provided with an ID number and personal identification number (PIN). At the conclusion of the Orientation session, students will register for courses via computer. Transfer students will fulfill Orientation requirements by meeting with an academic counselor, advisor or an admission advisor.

Non-award-seeking students are not required to attend an Orientation session. They will receive their Student ID number and PIN in the mail after application.

Orientation sessions for new students include:

- Useful information about College activities, policies and resources;
- Assistance with choosing and registering for first-semester classes;
- Opportunities to ask questions of College staff and experienced students; and
- Time to explore their new campus.

This Orientation is strongly encouraged to positively begin your College experience.



Paying for College

Tuition

Tuition Rates

Minnesota community and technical colleges offer the most affordable tuition and fees in the state. Tuition and fees are established by the Minnesota State Colleges and Universities Board of Trustees and are subject to change. **Tuition rates are posted online.**

Fees Included in Tuition

The tuition rate includes the following per-credit fees:

- *Technology Fee:* This fee is used to support and enhance the technology-based services provided to students.
- *Student Life Fee:* This fee supports student activities, clubs and organizations on campus.
- *Minnesota Student Association Fee:* This fee supports the Minnesota State College Student Association.
- *Health Services Fee:* This fee supports health services for students.
- *Student Center Fee:* This fee supports the construction costs of the Student Center.

Course Fees

Some courses require additional course fees to cover in-class expenses or supplies. (Below is a partial list of examples.) Depending on the course for which they register, students will be assessed one or more of the following fees:

- *Music Fee:* A charge is assessed for individual lessons in instrumental, piano or vocal music, as well as for private weekly lessons during the term.
- *Physical Education Fee:* Payment of special course fees may be required to participate in certain class activities (e.g., bowling, golf, skiing, etc.).
- *Liability Insurance Fees:* Certain courses and labs require the payment of a liability insurance fee.

Registration Cancellation for Nonpayment

Students who have not paid tuition by the tuition payment deadline may be dropped from all of their classes unless one or more of the following is true:

- The Financial Aid Office has received a Free Application for Federal Student Aid (FAFSA) file from the Department of Education by the payment deadline;
- The student has submitted approved third-party billing authorization to Business Services or is enrolled in the PSEO program;
- The student has submitted a 15 percent down payment of tuition and fees;
- Business Services has received advance payment of a scholarship to cover tuition and fees; and/or
- The student has been approved by Business Services to have the tuition payment deadline extended.

The tuition payment deadline is posted online.

Payment Options

Tuition payment may be made by mail, online or in person. Payment plan information is available online.

Where to Pay Tuition

Students may view tuition bills online via the registration system (e-services). Online payment options include Discover Card, MasterCard, Visa and e-check. Tuition and fees are paid in Business Services, located on the Skyway level of the Technical Building. Business Services is open Monday through Friday during the posted hours.

Third-Party Billing and Scholarships

Students who wish to have their tuition and fees billed to an agency or third party must have approved paperwork on file with Business Services by the tuition payment deadline to secure registration.

Scholarship checks and documentation should be sent to Business Services and must be on file by the tuition payment deadline to secure registration.

Deferment of Tuition Payment Deadline

Eligible students requesting tuition deferment must contact Business Services before the tuition payment deadline to hold their registration. The tuition of financial aid recipients and students with third-party billing or scholarships on file with Business Services are deferred by the College. See MCTC Policy 5.08.

Late Payment and Payment Plan Fees

The College will charge:

- A \$30 payment plan fee to students who do not pay in full by the Tuition Payment Deadline.
- A \$30 payment plan fee to students who apply for financial aid to hold their courses, but do not complete the process or receive an award to cover their entire balance due.
- A \$30 late fee to any balance not paid in full by the mid-point of the term.

Checks offered in payment of tuition and fees that are not honored by the bank constitute unpaid tuition and fees, and are therefore subject to the late fee. There is also a \$25 returned check fee. See MCTC Policy 5.08.

Financial Holds

The College will withhold registration for subsequent terms, as well as the issuance of official degrees, diplomas, certificates, and official student transcripts until all money due the College has been paid and school equipment or property has been returned.

Collections

Students who have not paid the balance owed the College will have their records submitted to the Minnesota Department of Revenue for collection per Minn. Stat. 16D. Additional collection fees and interest will be assessed on balances submitted for collection. See MCTC Policy 5.10

Tuition Refund and Waivers

Each term, a date is published as the “Last Day to Add/Drop Classes” without incurring tuition obligation. Per the registration agreement, students are responsible for all financial and academic costs for courses not dropped by this deadline.

Students who completely withdraw from all courses by the published deadlines may receive a partial refund of tuition and fees. See the college website for tuition refund deadlines.

Students meeting the published circumstances may petition for a refund of tuition and fees. Additional information is available online or by calling Business Services at 612-659-6880. See MCTC Policy 5.09.

The following classifications of persons are eligible to attend college without paying tuition as specified by state law:

- Wards of the state (persons under the age of 21 who are under the guardianship of the commissioner of human services), provided those persons are qualified for admission to a Minnesota state college or university; and/or
- War orphans (children of veterans who have died as a result of their service in the armed forces of the United States), as permitted and defined by state and federal law.
- Senior citizens (age 62 and older) who register after the second day of term and choose the grade-method of audit.

Other College Costs

Application Fee: A nonrefundable application fee of \$20 is charged once to each new applicant.

Metropolitan State University students co-enrolling at MCTC do not need to submit an application fee if they have already paid the Metropolitan State application fee.

Book Costs: The cost of textbooks and supplies varies with each course. An estimate of \$400 per term is a general guideline for the cost of textbooks and supplies for most full-time students.

Technical Program Tool/Equipment Fees:
Vary by program.

Student ID Card: Students may receive one Student ID card at no charge with proof of registration and payment. A \$20 fee is charged for replacement Student ID cards.

Reciprocity Agreements

Any student who is a legal resident of Wisconsin, North Dakota or South Dakota may attend a Minnesota public education institution and pay that state’s respective resident tuition rate for coursework under the educational compacts. Similarly, a legal resident of Minnesota may attend a Wisconsin, North Dakota or South Dakota public education institution and pay Minnesota’s resident tuition rate.

Applications for this agreement must be made in the home state of the student and generally take four to six weeks to process.

Wisconsin residents

Wisconsin Higher Educational Aids Board
Reciprocity Program
P.O. Box 7885
Madison, WI 53707-7885

North Dakota residents

North Dakota University System
State Capitol, 10th Floor
600 E. Boulevard Ave., Dept. 215
Bismarck, ND 58505-0230

North Dakota Board for Career and Technical Education
600 E. Boulevard Ave., Dept. 270
Bismarck, ND 58505-0230

South Dakota residents

South Dakota Board of Regents
Reciprocity Program, Box 2201
University Station
Brookings, SD 57007-1198

Minnesota residents who wish to transfer to public colleges in Wisconsin, North Dakota or South Dakota should apply to:

Reciprocity
Office of Higher Education
1450 Energy Park Drive, Suite 350
St. Paul, MN 55108

Midwest Student Exchange Program

Midwest Student Exchange Program (MSEP) is a reciprocal reduction-of-tuition arrangement for community college students pursuing an associate degree and living in the states of Kansas, Michigan, Missouri or Nebraska. (Students from Missouri may also use this reciprocity agreement for approved certificate programs.) Contact Student Services (T.2200) for more information.

Financial Aid

MCTC provides financial aid counseling to prospective and enrolled students. The Financial Aid Office provides assistance to eligible students whose personal and family resources are insufficient to meet the cost of attending MCTC. Financial Aid is available in the form of grants, work study and student loans. See MCTC Policy 4.08.

All financial aid recipients must be making satisfactory academic progress to continue to receive aid. See MCTC Policy 4.13 for more information.

Maximum Time Frame

All students are expected to complete their degree/certificate within an acceptable period of time. Financial aid recipients may continue to receive aid through their cumulative registered credit that equals 150 percent of the required number of credits needed to complete their degree/certificate, including transfer credits from another college. Students who require developmental or ESL coursework may appeal to have the 150 percent limit extended by 30 term credits.

Developmental Credits

A student receives developmental credits for any remedial course work below the 1000 level. Students may receive financial aid for developmental credits up to a maximum of 30 attempted credit hours. These credits are included in all satisfactory academic progress measures.

Students must also be accepted in an eligible major (16 or more credits) and pursuing a certificate, degree or diploma to be eligible for financial aid.

Students intending to enroll in the fall are encouraged to apply early for financial aid by filing the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.gov after January 1 for the following academic year. March is a priority deadline for some types of financial aid. Students should apply for financial aid at least two months before they start school.

Four Easy Steps to Apply for Financial Aid

By completing steps 1–4, students will be applying for all types of grants, work study and loans.

1. To submit the fastest, most accurate application, apply at www.fafsa.gov. Remember to use the MCTC Code 002362, and to print and submit the signature page. For help in applying, call the MCTC Educational Opportunity Center at 612-659-6543.

2. Students will receive Student Aid Reports (SAR) from the U.S. Department of Education acknowledging receipt of their FAFSA application. Check to see that all the information is correct. If something needs to be changed, follow the directions in the letter or contact the Financial Aid Office. About 30 percent of the people who send in their FAFSA forms are selected for a process called verification. If a student is selected, he or she must bring all requested income information, such as his or her U.S. tax return, to the Financial Aid Office. The student's financial aid application will be put on hold until the financial information is verified. Additional information such as Selective Service or academic transcripts may be required, according to federal and state regulations. To ensure timely notification of document requests, students should make sure their current mailing address is on file with the Records and Registration Office.
3. After receiving all requested information, the Financial Aid Office will determine eligibility for financial aid and send out a Financial Aid Award Letter. Students can also view their award letter online at www.minneapolis.edu. Log into "e-Services."
4. If applying for a student loan, students will need to complete a Master Promissory Note to secure the funds. First-time borrowers will also have to complete entrance counseling before a loan can be certified.

Financial aid will be disbursed for the first time starting the third week of each term, so students should plan to have personal funds available to meet rent and deadlines for other bills before their aid is available. Financial aid will be applied directly to students' accounts to pay for tuition, fees and any MCTC Bookstore expenses charged to their accounts. If the amount of financial aid exceeds their account balance, Business Services will mail a financial aid overage check. Students are paid financial aid only for the credits for which they are registered at the time of disbursement. Late adds are ineligible for the Federal Pell Grant.

Applicants Without a High School Diploma or GED

To receive financial aid at MCTC, students who have not completed a high school diploma or GED may still qualify for aid by achieving acceptable scores on assessment tests that meet the Ability to Benefit criteria. Acceptable scores are determined by the Department of Education based on federal regulations. Additional information is available from the Testing Center.

How Financial Aid Is Determined

Eligibility for financial aid is determined by the estimated cost to attend college for one academic year (cost of attendance) and what students and their families are expected to contribute to their education (expected family contribution, or EFC).

Cost of Attendance (COA)

The estimated cost of attendance includes tuition and fees, supplies, books, room and board, transportation, and personal expenses. It is an estimate of the total cost to cover the above items during one academic year.

Expected Family Contribution (EFC)

The EFC is an indicator of a student's family's relative financial strength, and is an estimate of the dollars they would have to contribute to the student's college expenses for the academic year. It is determined by a federal formula when students file the FAFSA. Factors considered include income, assets, the number of members in the household and number of family members attending college.

Financial Need

Eligibility for need-based financial aid is determined by subtracting the EFC from the estimated COA. After financial need is calculated, the MCTC Financial Aid Office awards first the maximum federal and state grants that students are eligible to receive, then work study and loans. Students may also be awarded non-need-based loans based on eligibility.

Most financial awards will include a combination of aid sources.

Example:

If your financial need is:

Estimated Cost of Attendance (for one year) \$22,000

Expected Family Contribution \$0

Financial Need \$22,000

Then your total award may be:

Federal Pell Grant \$5,350

Minnesota State Grant \$1,500

Federal Work Study \$5,000

Federal Subsidized Stafford Loan \$3,500

Grants

Grants are gift dollars that do not have to be repaid. They are generally awarded based on financial need.

Federal Pell Grant

Federal Pell Grants are based on need and are available to students who have not previously earned a bachelor's degree (four-year college degree). Grants range from \$976 to \$5,350 per year, depending on a student's financial need and enrollment status. Enrollment status is as follows:

- Full-time: 12 or more credits
- Three-quarter time: 9–11 credits
- Half-time: 6–8 credits
- Less than half-time: 1–5 credits

Federal Supplemental Education Opportunity Grant

MCTC offers Federal Supplemental Education Opportunity Grant (FSEOG) awards from \$300 to \$900 to students who receive a Federal Pell Grant and who demonstrate exceptional financial need. FSEOG funds are very limited.

Minnesota State Grant

This state award is for Minnesota residents who demonstrate financial need under the state's Shared Responsibility Formula. Students must be registered for 15 credits to receive the maximum state grant award. Awards are prorated by credit for registration of less than 15 credits. To receive a Minnesota State Grant, the federal processing system must receive the FAFSA within 30 calendar days of the term's start date.

Work Study

Work study enables students to work part-time to help pay for college expenses. If a student's financial aid award letter includes work study, go to www.minneapolis.edu/financialaid and click on Work Study to see available work study positions.

Students who qualify for federal or state work study may work up to 20 hours per week.

Employment opportunities are also available for students who do not qualify for other financial assistance. Students who possess special skills, such as fluency in a foreign language or tutoring abilities, are needed by MCTC to fill openings. Interested students may contact the Financial Aid Office to discuss their qualifications and available positions. Institutional work study funds are very limited.

Loans

A student loan is funding that has to be repaid. If a student's financial aid award letter indicates he/she is eligible for student loans, the student must take additional steps to secure those funds. Please refer to the financial aid award information at www.minneapolis.edu/financialaid for procedures on applying for a student loan. New loan borrowers must complete mandatory loan counseling prior to receiving a student loan. In addition, all students wanting a student loan must complete a Direct Loan Promissory Note.

Federal Direct Subsidized Stafford Loan

The Federal Direct Subsidized Stafford Loan program enables students attending college at least half-time (6 credits) to borrow from the U.S. Department of Education. The maximum amount a student may borrow in the first year is \$3,500. The interest rate is generally much lower than that of a consumer loan, so it is a benefit to the student to borrow from this program.

Additionally, the subsidized loan does not accrue interest while the student is enrolled at least half-time. There is a grace period of six months after a student leaves college or drops to less than half-time that allows the borrower to secure a job before repayment must begin.

Federal Direct Unsubsidized Stafford Loan

The Federal Direct Unsubsidized Stafford Loan program enables independent students (and in some cases, dependents) attending college at least half-time (6 credits) to borrow from the U.S. Department of Education. An eligible student may borrow up to \$6,000. The student is charged interest while in school.

Scholarships and Other Sponsored Funding

MCTC works with many agencies and employers that pay a student's tuition and other costs of attendance. This process is known as Third-Party Billing. The agency or employer must submit a written agreement to MCTC Business Services detailing which expenses will be paid for the sponsored student by the tuition payment deadline. Following a student's enrollment, MCTC will bill the sponsor for the authorized college costs.

A complete set of instructions, including the Third-Party Authorization Form, is available online.

Students who believe they may qualify for assistance from any of the following agencies may contact the agency directly:

• MCTC Foundation Scholarship Program

The Minneapolis Community and Technical College Foundation awards scholarships each year to students attending MCTC. Applicants must have a completed FAFSA on file at the MCTC Financial Aid Office in order to be considered for a scholarship. Personal essays and letters of recommendation will also be required. Additional criteria, requirements and deadlines for each scholarship are listed in the official scholarship application packet.

Further information and scholarship application packets are available by contacting the MCTC College Advancement Office at 612-659-6313.

• Veterans Benefits

Veterans, widows of veterans, and children of disabled or deceased veterans may qualify for special benefits. Contact the Veterans Administration Representative on campus or the Veterans Administration Office in your area.

• Vocational Rehabilitation

Students with certain physical, learning, or emotional disabilities may qualify for assistance with tuition, books, supplies and, in some cases, room and board. Contact the Minnesota Workforce Center in your area. Students with visual impairments can contact State Services for the Blind.

• Minnesota Indian Scholarship Program

This grant program provides supplemental scholarship assistance to eligible applicants. To be eligible, you must:

- Show financial need;

- Be of one-fourth or greater Indian ancestry;
- Be a resident of Minnesota;
- Be a high school graduate or GED recipient; and
- Show the ability to benefit from advanced education.

The scholarship is subject to final approval by the Minnesota Indian Scholarship Program (MISP). For further information, contact the tribal representative located in the Counseling and Advising Office Suite (T.2500).

• Tribal Indian Scholarship Program

These grants provide recognized members of tribes in the United States with supplemental grants. For further information, contact the tribal representative located in the Counseling and Advising Office Suite (T.2500).

• Childcare Assistance: Postsecondary Childcare Grant

Limited funds are awarded based on family size and income. Students must be Minnesota residents, enrolled for 6 credits or more, and have not completed four years of education beyond high school. Contact the Financial Aid Office for an application.

• Tuition Reimbursement Programs (Employer Sponsored)

Many area employers offer tuition reimbursement to their employees. These programs are administered by the student's employer and are subject to the employer's rules and procedures. Students are encouraged to contact their supervisor or the Human Resources Department to see if they are eligible. However, these programs often differ from Third-Party Billing, as many employers require the student to pay for their college costs up front and then apply for reimbursement after they complete the courses. Business Services does not administer or extend the tuition payment deadline for Tuition Reimbursement Programs.

• Tuition Assistance for Deaf Students

Students with hearing losses requiring sign language or captioning services or alternate communication due to a severe hearing loss may be eligible for tuition assistance. To be eligible, students must be a Minnesota resident, eligible for resident tuition, and receive a federal Pell Grant or Minnesota State Grant. Tuition assistance is provided for any tuition and fees remaining after deducting any federal or state grants or other public or private grants for tuition.

In order to receive tuition assistance, students must provide a copy of the financial aid award letter and verification of disability status to Disability Services. Further information is available by contacting Disability Services at 612-659-6730 (voice) or 612-659-6731 (TTY).



Registering for Classes

Registration Process

Students can register online or in person at the Student Services Center (computer terminals to register online are available there). The procedures and dates for class registration vary depending upon the number of accumulated credits and whether a student is seeking an award. Refer to the College website www.minneapolis.edu for specific registration dates.

New Students

New students will be provided with a Student ID number and Password and register for classes at the New Student Orientation. Non-degree-seeking students will receive their Student ID number and Password in the mail after application.

Continuing and Returning Students

Around mid-term of each semester, students should meet with a counselor/advisor for assistance in selecting courses for the next term.

Multiple Sections Prohibited

Students may not register for more than one section of a class. Students who register for multiple sections of the same course may be subject to discipline and will have their duplicate enrollments cancelled.

- Students who register in two or more sections of the same course will have the earlier registration removed. Students will be notified by mail.
- Students who register in two or more lab sections of the same course will have the earlier of the lab registrations removed, resulting in registration in only one lab. Students will be notified by mail.
- For courses requiring concurrent registration in lab and lecture, students who register into the lab only will have their registration removed without notice.

Adding and Dropping Classes

Classes may be added and dropped by the student through the first five days of the school term. See MCTC Procedure 4.05.01. The add/drop window is shorter for the summer term. See the class schedule for specific add/drop dates.

The drop deadline for short-term classes (less than 13 weeks in length) is midnight of the business day following the first day of classes.

The exceptions are:

- Classes that begin on a Saturday have a drop deadline of midnight the following Monday (business day); and
- Nursing Assistant/Home Health Aide classes must be dropped before the first class meeting.

Dropped classes do not appear on the student's transcript, nor do they affect the Satisfactory Academic Progress percent of completion requirement.

Credit Load Limitations

A student may not take more than 19 credits per fall or spring term, or 10 credits per summer term, without permission from the Registrar's Office. See MCTC Policy 4.05.

The Registrar's Office uses the following criteria to determine eligibility to exceed these credit load limits:

- The student has a cumulative GPA of at least 2.75 at the College and has accumulated 20 credits;
- A student transfers in with a 3.0 GPA and an accumulation of 20 credits; and
- If there are other documentable circumstances that justify the exception.

It is recommended that students considering exceeding credit load limits review their academic plans with a counselor.

Course Cancellations

The Office of Academic Affairs reserves the right to cancel a course or course section after the schedule has been published if the Vice President of Academic and Student Affairs determines that it would be in the best interest of the College.

Students who registered for a course that has been cancelled will be notified via phone and mail.

Prerequisites

A prerequisite is a requirement that must be satisfactorily completed before a student may enroll in another class or program. Examples of prerequisites include successful completion of a class, achievement of a specified grade in a class, test placement into a specified class, and program admission or instructor permission to enroll. Prerequisites are listed in the college catalog.

Students are responsible for completing any prerequisites listed for a course prior to enrolling in the course. Students may register for a course if they are in the process of completing a prerequisite for a course to begin the next term. It is the student's responsibility to cancel enrollment prior to the end of the drop/add period if the required course is not completed satisfactorily or the required grade for the next course in the sequence is not earned. Grades of fail (F), incomplete (I), or withdrawal (W) are all considered noncompletion. Students who have not cancelled their enrollment for the next course may have the course dropped by the College.

A student may petition for a waiver from a course prerequisite by demonstrating readiness for a class through previous coursework, work experience or other relevant experience. Students should complete a Waiver of Course Prerequisite form, following the instructions carefully, and submit the completed form to the Student Services Center along with supporting documentation.

Failure to meet prerequisites for a class may result in cancellation of enrollment in the course, denial of tutoring services for that class, dismissal of any grievance for that class and unsuccessful appeal of an academic suspension.

Taking a Class Pass/Fail

Students may elect to take a class on a pass/fail (P/F) basis. See MCTC Policy 3.08. The student must select a P/F option via the web. Instructions for web use and deadline dates for filing for the P/F option are listed on the College's website.

No more than one-third of a student's resident credit load may be "P" grades for certificate, diploma or degree credit. Classes that have an assigned grade of "P" are not included in these restrictions.

Students who choose the P/F option and complete the class with a grade equivalent to A, B or C will receive a "P" on their transcript. The "P" grade does not affect the grade point average (GPA). Students who complete the class with a grade equivalent to D or F will receive an "F" on their transcript. The "F" grade will affect the GPA.

Students who choose the pass/fail option will not be allowed to petition at a later date to have a letter grade entered on their transcripts.

Some MCTC programs do not accept "P" grades for particular classes. This information is available in the specific program brochures and course outlines. "P" grades may not transfer to another college or university and are at the discretion of the receiving institution. Please review each institution's catalog for information on course transfer.

Auditing a Class

Students wishing to attend a course without receiving a letter grade may request to audit the course. Students wishing to audit a course must request an audit online. Deadline dates for filing the audit option are listed on the College's website. Financial aid cannot be awarded for audited courses. PSEO students are not eligible to audit a course. Audited courses generally do not transfer to other colleges. Full tuition is charged for audited courses. See MCTC Policy 3.08A. Students must meet all prerequisites for the audited course.

Repeating a Course

Students in technical programs may, with permission from their advisor and the instructor, repeat any course. A student may repeat a course a maximum of two times. Liberal arts courses do not require permission to be repeated and may be repeated more than twice. Exception: Addiction Counseling courses may only be repeated once, and the internship may not be repeated.

A course may be repeated for an improved grade. Only the highest grade earned will be counted toward certificate, diploma, or degree credit and in the computation of the overall numeric GPA. This policy applies to all grades, including "F" grades. Both the original and the repeated grade will appear on the student's transcript. Tuition and fees will be charged each time. Students repeating a course will have their GPA recalculated at the end of each term by the Registrar's Office. If the course was originally taken under the quarter system, the student should contact the Registrar's Office to have the GPA recalculated.

Withdrawing from a Class

Deadlines for Withdrawing

The withdrawal period begins after the fifth (and occasionally the sixth) day of a term and extends until the last day to withdraw as listed in the Academic Calendar for full-term classes. See MCTC Procedure 4.05.01.

The deadlines to withdraw from short-term classes are as follows:

- Classes one to three weeks in length: one day after the class begins;
- Classes four to six weeks in length: 10 days after the class begins;
- Classes seven to nine weeks in length: four weeks after the class begins; and
- Classes 10–13 weeks in length: six weeks after the class begins.

Procedure for Withdrawing

A student may withdraw from a course at www.minneapolis.edu/registration before the deadline to withdraw published on the college's website.

Students are responsible for *paying all tuition and fees* for courses in which they enrolled, even if they withdraw from the course. Students who enroll in a course but never attend or stop attending prior to the end of the term are still responsible for full payment of all tuition and fees for that course.

PSEO students may change their registration on and after the first day of the term only with their PSEO advisor's signature.

A "W" for withdrawal will appear on the student's transcript and is calculated against the Satisfactory Academic Progress percent of completion requirement.

Attendance

Students are expected to regularly attend classes in which they are enrolled and abide by MCTC Policy 4.05.01 Procedures for Changing Enrollment. Students who decide to stop attending courses should immediately drop/withdraw from their course(s). Students who fail to officially withdraw from a course (or courses) they are not attending, as defined by "Last Date of Attendance" (MCTC policy 4.16 Last Date of Attendance) may be administratively withdrawn from those courses. The student will remain responsible for any financial liability, less applicable refunds they have incurred, and for any academic consequences due to this administrative withdrawal.



Taking Classes

Academic Credits

There are three types of academic credits: lecture credits, lab credits and internship credits. For each credit type there is a required number of minutes that a student must be in the classroom, laboratory or working at an internship:

- 50 minutes per lecture credit per week;
- 100 minutes per lab credit per week; and/or
- 150 minutes per internship credit per week.

For example, a 3-credit lecture class that meets twice per week would meet for 75 minutes each class period (3 credits x 50 minutes ÷ two class sessions). To receive 2 credits for an internship, a student would need to work at the site for 300 minutes (five hours) per week.

Course Options

In addition to the extensive selection of traditional course offerings available each semester at MCTC, a student has a number of other educational opportunities available. See MCTC Policy 3.02.

Online Courses

MCTC offers many of its courses fully or partially online. Those courses with laboratory requirements offer the lecture portion of the course online but require students to come to campus to work in the laboratory.

Students contemplating taking an online course are advised to take a personal inventory to assess their readiness for this method of learning. Beyond the equipment and Internet requirements (computer hardware and software, a printer with adequate capacity, and an Internet connection of sufficient reliability and speed), online students should be skilled independent learners with a demonstrated history of self-discipline to succeed in the course without face-to-face interaction with an instructor and student peers.

If the instructor believes that any student has violated the Student Code of Conduct (e.g., committed academic dishonesty) in an online course, the instructor may require the students to complete some or all of the course activities on campus. See MCTC Policy 4.04.01.

Service Learning and Project SHINE

A program or instructor may require, or provide as an option, student participation in a service learning activity. Participating in a service learning activity provides an opportunity for a student to apply in a community setting what he or she is learning in the classroom. This experience enhances and deepens learning for the student and provides some relief where there is an identified need in the community.

Credit for a service learning activity is based on an evaluation of learning via a method established by the instructor and not on the number of hours of service.

Project SHINE (Students Helping in the Naturalization of Elders) is a national service learning initiative that links college students with elder immigrants and refugees seeking to learn English and navigate the complex path to U.S. citizenship. Students tutor immigrant learners in English, as well as teach them the history and civics needed to pass the U.S. citizenship exam. Student participants gain knowledge of diverse cultures and life experiences, and they develop skills beyond the textbook. Students can enroll in designated classes wherein the instructor has incorporated Project SHINE into the course curriculum. Students complete 20 hours of service work and four hours of training and orientation. To find out more about Project SHINE at MCTC, contact the program coordinator at 612-659-6135.

Directed Study

As allowed in MCTC Policy 3.02 (Appendix E), a student may earn up to 4 semester credits for an approved directed study project. Directed study credits apply only to the elective credits of a program.

A student must submit a project proposal and receive approval from the instructor and departmental dean prior to beginning coursework to receive credit. Project proposals will not be approved when the same course is offered in the current term. Directed study forms are available in the Office of Academic Affairs.

Internships and Clinicals

Experience in the field is a mandatory component for some technical and liberal arts program awards and is optional for others. It is the student's responsibility to know and observe all program guidelines and policies related to internships and clinicals. Contact the program instructor or a counselor for more information.

Continuing Education and Customized Training

An education doesn't end with a diploma or degree—it prepares students for a lifetime of learning. Continuing to expand their skills and knowledge is the key that unlocks the door to success. Learning that engages the heart and soul and mind can keep one fulfilled in one's work and personal life.

The mission of MCTC's Continuing Education and Customized Training Program is to advance economic development and community vitality by providing innovative continuing education, training, and personal enrichment courses to individuals and organizations throughout the Twin Cities metropolitan area.

We offer a spectrum of unique continuing education classes and programs to help students learn new skills, make career transitions, expand their perspectives on the world around them, and explore their creativity and imaginations. We are committed to offering quality programs that promote professional and personal growth—now and in the future. Organizations and individuals have benefited from our courses and training programs in:

- Architectural Technology
- Business and Finance
- Communications and Writing
- International Business
- Information Technology
- Graphic Design
- Web Design and Development
- Microsoft Applications
- Nursing and Healthcare
- Counseling and Social Work
- Language and Travel
- Screenwriting and Film
- Dance, Photography and Culinary Arts
- Welfare-to-Work

When employers come to us for help in maximizing the potential of their greatest competitive advantage—their employees—we respond quickly, capably and affordably with training solutions to today's business challenges. Visit www.minneapolis.edu/cect for course offerings, or call 612-659-6500.

Evaluating Academic Performance

Class Syllabus

An instructor is required to provide to students a written syllabus on the first day of class that outlines:

- Contact information for the instructor and his or her office hours;
- Course objectives and procedures for reaching those objectives;
- Standards for classroom participation, behavior and attendance;
- Types of assignments and tests;
- Due dates of assignments and policies on accepting late or inadequate work; and
- Criteria for evaluating student work and grade determination.

Grading System

As outlined in MCTC Policy 3.08 (Appendix E), the instructor of a course will evaluate each student's performance relative to the established criteria for the course and assign one of the following grades:

- *A*—Superior (4 grade points per credit)
- *B*—Above Average (3 grade points per credit)
- *C*—Average (2 grade points per credit)
- *D*—Below Average (1 grade point per credit)
- *F*—Failure to meet criteria (0 grade points per credit)
- *P*—Pass with credit (No grade points, but credit granted)
- *NC*—No credit (No grade point, no credit given)

Some programs require that all course work must be completed with a grade of C or higher. Some programs require a letter grade of A–F for program course work. See specific programs for actual grade requirements.

Specific dates for changing a grade option or withdrawing are listed on the college website. If a student fails to withdraw from a course in which the student is no longer participating, the instructor will record an "F" for the student at the end of the term. See instructions on how to withdraw from a course and its potential impact on your academic progress.

Grade Point Average (GPA)

To calculate a cumulative GPA, divide the total number of grade points earned by the total number of credits taken for a letter grade (A, B, C, D or F).

The grade point average and completion rate at MCTC determines academic standing. See MCTC Policy 4.13. A minimum GPA of 2.0 in courses taken at MCTC is required for graduation.

Incomplete Grades

As permitted in MCTC Policy 3.08, a student may be granted an incomplete when the instructor believes there is a reasonable expectation that the student can complete the work for a course. An "I" will appear on the student's transcript until a grade has been determined or the deadline to complete the work has passed.

The instructor and student should identify in writing expectations for completing the work. The deadline to complete coursework is determined by the instructor but may be no later than the end of the eighth week of the next semester, not including summer session. If the instructor has not submitted a letter grade by the eighth week of the next semester, a grade of "F" or "NC," as applicable, will be entered by the Registrar's Office.

Final Exams

The Office of Academic Affairs schedules final examinations for Liberal Arts each term. The schedule provides for a two-hour-and-45-minute examination period for each course.

Cancellation of a Class Session

In the event of illness, inclement weather or unforeseen circumstances, a class session may be cancelled. When possible, efforts will be made to contact students in advance.

College closings due to inclement weather or other emergencies will be announced on WCCO AM 830 radio, and will be posted on the College website.



Earning an
Award

Earning an Award

MCTC Awards

As governed by MCTC Policies 3.03 and 3.09, the following awards are conferred by MCTC faculty to students who successfully complete:

1. The requirements of the award program; and
2. The graduation requirements outlined in this catalog.

As governed by MCTC Policy 3.05, most awards have General Education Transfer Curriculum (MnTC) requirements. Eligible courses have an MnTC designation in brackets after the course description that identifies the goal area or areas to which the course can be applied. Unless otherwise specified, a course cannot be used to meet the requirements of more than one goal area.

Associate in Arts Degree

As governed by MCTC Policies 3.03 and 3.05, students seeking an associate in arts (A.A.) degree from MCTC must successfully complete a total of 60 college-level credits as outlined below.

MnTC Requirements: 40 Credits

Students must successfully complete a total of 40 credits of coursework in all MnTC goal areas.

- **Goal Area 1. Written and Oral Communication**

A minimum of 9 credits, which must include ENGL 1110 and 1111, as well as an eligible speech communications course.

- **Goal Area 2. Critical Thinking**

This goal is accomplished through completion of the 40 MnTC credits.

- **Goal Area 3. Natural Sciences**

A minimum of two courses in different disciplines, one a lab science.

- **Goal Area 4. Mathematical and Logical Reasoning**

A minimum of one course.

- **Goal Area 5. History and the Social and Behavioral Sciences**

A minimum of three courses, in three different disciplines.

- **Goal Area 6. Humanities and Fine Arts**

A minimum of three courses, in three different disciplines.

- **Goal Areas 7–10. Human Diversity, et. al.**

A minimum of one course in each goal area 7–10.

Required Coursework: 5 credits

- Health: 2 credits
- Physical Education: 1 credit
- INFS 1000: 2 credits

Elective Credits

The number of elective credits needed will vary depending on the number of MnTC and required coursework credits a student accumulates.

Completion Requirement

Students seeking an A.A. degree must complete ENGL 1110 and information literacy requirements within their first 24 college-level course credits (those courses numbered 1000 or above).

Online A.A.

The A.A. degree can be earned online at MCTC. Go to www.minneapolis.edu/onlineaa.

Online Associate of Arts Degree

The online Associate in Arts (Online A.A.) degree program involves taking online courses that are required for earning the A.A. degree.

Like the on-campus A.A. degree program, you can transfer to a college or university to finish a bachelor's degree after you complete the Online A.A. degree at MCTC.

Overview of Online A.A.

For an overview of the Online A.A. degree, do the following:

1. View the virtual Get Started session.
2. Take an online course self-assessment to see if you're ready for taking online classes.
3. Read about the A.A. degree requirements.
4. View a list of online classes that are available by term.
5. Use the Online A.A. course menu as a planning worksheet. (Students seeking the Online A.A. degree at MCTC must choose online courses from this course menu.)
6. Learn how to register for classes online.
7. Read the Desire2Learn/eLearning support web page to learn more about Desire2Learn (D2L), the course management system MCTC uses to deliver online courses.
8. Preview an online (D2L) course. Use `onlinestudent` (all lower case) for both the Username and Password.
9. If you want to be admitted to the Online A.A. degree program, or continue your A.A. degree online, follow the steps listed in the Online A.A. degree checklist.

eAdvisor for Online Students

MCTC's eAdvisor is a trained academic advisor from MCTC's Office of Counseling and Advising who specializes in helping students in the Online A.A. program.

The eAdvisor can answer your questions about the application process, guide you through registering for classes, help you plan for both your short- and long-term academic goals, and much more.

Whatever your question or concern about the Online A.A. program, the eAdvisor can help; contact the eAdvisor via email.

Transferring MnTC Credits to Another Institution

Students who complete the MnTC coursework required for an A.A. degree as outlined above may transfer these credits to another MnSCU institution and receive credit for all lower division general education courses upon admission to that institution.

Associate in Fine Arts Degree

As governed by MCTC Policies 3.03 and 3.05, students seeking an Associate in Fine Arts (A.F.A.) degree from MCTC must successfully complete the degree requirements determined by the Fine Arts faculty, which include MnTC-required credits. Refer to the Programs and Credentials section of the catalog for specific requirements.

MCTC has Associate in Fine Arts degrees in both Theatre and Visual Arts.

Associate in Science Degree

As governed by MCTC Policies 3.03 and 3.05, students seeking an Associate in Science (A.S.) degree from MCTC must successfully complete the degree requirements determined by the specific program, which include MnTC-required credits. Refer to the Programs and Credentials section of the catalog for specific degree requirements.

MnTC Requirements: 30 Credits

Students must successfully complete 30 credits of coursework in a minimum of six MnTC goal areas. Of these credits, students must earn a minimum of three credits in MnTC Goal Area 1 and three credits in MnTC Goal Areas 7, 8, 9 or 10.

Associate in Applied Science Degree

As governed by MCTC Policies 3.03 and 3.05, students seeking an Associate in Applied Science (A.A.S.) degree from MCTC must successfully complete the degree requirements determined by the specific program, which include MnTC-required credits. Refer to the Programs and Credentials section of the catalog for specific degree requirements.

MnTC Requirements: 25 Percent of Required Credits

Students must successfully complete MnTC requirements equal to 25 percent of the required award credits in a minimum of three MnTC goal areas. Of these credits, students must earn a minimum of three credits in MnTC Goal Area 1 and three credits in MnTC Goal Areas 7, 8, 9 or 10.

Diploma

As governed by MCTC Policies 3.03 and 3.05, students seeking a two-year diploma from MCTC must successfully complete the diploma requirements determined by the specific program, which include MnTC-required credits. Refer to the Programs and Credentials section of the catalog for specific diploma requirements.

Two-Year Diploma MnTC Requirements: 9 Credits

Students seeking a two-year diploma must successfully complete nine credits of coursework in the MnTC goal areas. Of these credits, students must earn a minimum of three credits in MnTC Goal Area 1 and three credits in MnTC Goal Areas 7, 8, 9 or 10.

Three-Semester Diploma MnTC Requirements: 6 Credits

Students seeking a three-semester diploma must successfully complete six credits of coursework in the MnTC goal areas. Of these credits, students must earn a minimum of three credits in MnTC Goal Area 1.

Two-Semester Diploma MnTC Requirements: 3 Credits

Students seeking a two-semester diploma must successfully complete three credits of coursework in MnTC Goal Area 1.

Certificate

As governed by MCTC Policies 3.03 and 3.05, students seeking a certificate from MCTC must successfully complete the certificate requirements determined by the specific program, which may include MnTC required credits. Refer to the Programs and Credentials section of the catalog for specific award requirements.

MnTC Requirements: 3 credits

Students seeking a two-semester certificate must successfully complete three credits of coursework in MnTC Goal Area 1.

General Education

Why is general education important? The consensus among educators and employers is that knowledge of human cultures and the physical and natural world, intellectual and practical skills, personal and social responsibility, and integrative learning are needed for a 21st-century education. According to the American Association of Colleges and Universities, "This new consensus reflects a dawning awareness that America's future will depend on an unprecedented determination to develop human talent as broadly and fully as possible:

- **In an era when knowledge is the key to the future**, all students need the scope and depth of learning that will enable them to understand and navigate the dramatic forces—physical, cultural, economic, technological—that directly affect the quality, character and perils of the world in which they live.
- **In an economy wherein every industry—from the trades to advanced technology enterprises—is challenged to innovate or be displaced**, all students need the kind of intellectual skills and capacities that enable them to get things done in the world, at a high level of effectiveness.
- **In a democracy that is diverse, globally engaged, and dependent on citizen responsibility**, all students need an informed concern for the larger good because nothing less will renew our fractured and diminished commons.
- **In a world of daunting complexity**, all students need practice in integrating and applying their learning to challenging questions and real-world problems.
- **In a period of relentless change**, all students need the kind of education that leads them to ask not just 'how do we get this done?' but also 'what is most worth doing?'

With organizations constantly reinventing their products and their processes, and with questions about public and life choices more complex than ever, the world itself is setting higher expectations for knowledge and skill." (From *College Learning for the New Global Century*, published by the American Association of Colleges and Universities, 2007.)

To those ends, the faculty of MCTC have adopted the following four general education competencies appropriate to all instructional programs at the College:

- Communications
- Critical Thinking
- Life Skills/Personal Responsibility
- Social Responsibility

See MCTC Policy 3.04.

These core competencies are a means to enhance lifelong education by making it possible for students to communicate effectively, think critically, solve problems, and develop and demonstrate effective life skills, personal responsibility, and social responsibility.

Minnesota General Education Transfer Curriculum Competencies

Below is a list of courses eligible for each of the 10 MnTC goal areas. See MCTC Policy 3.05 for additional information regarding this curriculum.

See Associate in Arts Degree for specific MnTC goal area requirements (pg. 22).

Goal 1: Written and Oral Communication

- ENGL 1110, ENGL 1111
- SPCH 1000, SPCH 1005, SPCH 1010, SPCH 1011, SPCH 1012, SPCH 1013

Goal 2: Critical Thinking

Most courses within the MnTC teach one or more of the critical thinking student competency areas. Any student who completes the 40 credit MnTC will have completed the student requirements for Critical Thinking.

Goal 3: Natural Sciences

- ASTR 1110, ASTR 1115
- BIOL 1100, BIOL 1120, BIOL 1127, BIOL 1128, BIOL 1136, BIOL 1137, BIOL 1160, BIOL 2200, BIOL 2205, BIOL 2224, BIOL 2225, BIOL 2226, BIOL 2230, BIOL 2231, BIOL 2250, BIOL 2260, BIOL 2500
- CHEM 1020, CHEM 1040, CHEM 1041, CHEM 1145, CHEM 1151, CHEM 1152, CHEM 2204, CHEM 2205, CHEM 2224, CHEM 2225
- GEOL 1120, GEOL 1130, GEOL 1140, GEOL 1150
- HONR 2000
- PHYS 1100, PHYS 1131, PHYS 1132, PHYS 1211, PHYS 1221

Goal 4: Mathematics/Logical Reasoning

- CSCI 2011
- MATH 1110, MATH 1120, MATH 1125, MATH 1130, MATH 1140, MATH 1150, MATH 1160, MATH 1165, MATH 1170, MATH 1180, MATH 1190, MATH 2011
- PHIL 2110

Goal 5: History and the Social and Behavioral Sciences

- ACES 1500, ACES 1510, ACES 1120
- AMIS 1000, AMIS 1120
- AMST 1000, AMST 1100
- ANTH 1104, ANTH 1105, ANTH 1150
- ECON 1000, ECON 2000, ECON 2200, ECON 2500
- GEOG 1101, GEOG 1102, GEOG 1103, GEOG 1104, GEOG 2204
- HIST 1000, HIST 1010, HIST 1020, HIST 1100, HIST 1110, HIST 1200, HIST 1210, HIST 1300, HIST 1310, HIST 1320, HIST 1500, HIST 1510, HIST 1520, HIST 1600, HIST 2241, HIST 2242, HIST 2243
- INFS 2520, INFS 2600
- PSCI 1101, PSCI 1102, PSCI 1103, PSCI 1104, PSCI 1110, PSCI 1111, PSCI 1137, PSCI 1140, PSCI 1143, PSCI 1147, PSCI 1149, PSCI 1169, PSCI 2000
- PSYC 1100, PSYC 1110, PSYC 2215, PSYC 2225, PSYC 2240, PSYC 2250, PSYC 2260, PSYC 2275, PSYC 2285
- SOCI 1105, SOCI 1106, SOCI 1110, SOCI 1160, SOCI 1170, SOCI 2115, SOCI 2145, SOCI 2150, SOCI 2155
- WOST 1101, WOST 1120

Goal 6: Humanities and Fine Arts

- ACES 1000, ACES 1100, ACES 1121, ACES 1122, ACES 1132, ACES 1135, ACES 1140, ACES 1152, ACES 1155, ACES 1190, ACES 1210, ACES 1200
- AMIS 1100, AMIS 1200, AMIS 1300
- AMST 1132, AMST 1155
- ARTS 1110, ARTS 1111, ARTS 1112, ARTS 1113, ARTS 1121, ARTS 1125, ARTS 1132, ARTS 1133, ARTS 1141, ARTS 1142, ARTS 2211, ARTS 2212, ARTS 2213, ARTS 2214, ARTS 2221, ARTS 2222, ARTS 2225, ARTS 2233
- CIST 1101, CIST 1102, CIST 1103, CIST 1104, CIST 1106
- ENGL 1150, ENGL 1151, ENGL 1152, ENGL 1153, ENGL 1154, ENGL 1156, ENGL 1157, ENGL 1158, ENGL 1159, ENGL 1160, ENGL 1161, ENGL 1162, ENGL 2212, ENGL 2213, ENGL 2214, ENGL 2215, ENGL 2225, ENGL 2226, ENGL 2231, ENGL 2232, ENGL 2251, ENGL 2252, ENGL 2261, ENGL 2262
- FREN 1300
- MUSC 1000, MUSC 1010, MUSC 1020, MUSC 1030, MUSC 1040, MUSC 1050, MUSC 1060, MUSC 1150, MUSC 1160
- PHIL 1110, PHIL 1115, PHIL 1171, PHIL 1172, PHIL 1181, PHIL 2115, PHIL 2171
- PHOT 1100, PHOT 1200
- SPAN 1145
- THTR 1104, THTR 1111, THTR 1131, THTR 1135, THTR 1145, THTR 1150, THTR 1160, THTR 1161, THTR 1162, THTR 1163, THTR 1164, THTR 1165, THTR 1166, THTR 1167, THTR 1168, THTR 1169, THTR 1170, THTR 2105, THTR 2145, THTR 2150
- WOST 1140, WOST 1150, WOST 2200, WOST 2211, WOST 2212, WOST 2213, WOST 2235

Goal 7: Human Diversity

- ACES 1100, ACES 1120, ACES 1132, ACES 1135, ACES 1140, ACES 1152, ACES 1155
- AMIS 1000, AMIS 1100, AMIS 1132, AMIS 1200, AMIS 1300
- AMST 1132
- CIST 1104
- ENGL 1152, ENGL 1153, ENGL 1157, ENGL 1159, ENGL 1160, ENGL 1161, ENGL 2231, ENGL 2232, ENGL 2261, ENGL 2262
- HIST 1100, HIST 1110, HIST 1200, HIST 1210, HIST 1300, HIST 1310, HIST 1320, HIST 1500, HIST 1510, HIST 1520, HIST 1600
- PSYC 2225
- SOCI 1105, SOCI 1106, SOCI 1110, SOCI 2115, SOCI 2145
- SPCH 1012
- WOST 1120, WOST 1140, WOST 1150

Goal 8: Global Perspective

- ACES 1121, ACES 1122, ACES 1190, ACES 1200, ACES 1500, ACES 1510
- AMIS 1400, AMIS 1500
- AMSL 1000, AMSL 1100
- AMST 1000, AMST 1155
- ANTH 1105, ANTH 1150
- ARAB 1000, ARAB 1100
- ARTS 1110, ARTS 1111, ARTS 1112, ARTS 1113
- CHIN 1000, CHIN 1100
- CIST 1103, CIST 1106
- ECON 2000, ECON 2200, ECON 2500
- ENGL 1151, ENGL 1158, ENGL 1162, ENGL 2225, ENGL 2226, ENGL 2251, ENGL 2252
- FREN 1000, FREN 1100, FREN 1200, FREN 1300, FREN 2000, FREN 2100
- GEOG 1101, GEOG 1103, GEOG 2204
- HIST 1000, HIST 1010, HIST 1020, HIST 1200, HIST 1210, HIST 1310, HIST 2243
- HONR 2000
- INFS 2600
- MUSC 1030, MUSC 1040, MUSC 1050, MUSC 1060
- PHIL 2115
- PSCI 1103, PSCI 1104, PSCI 1140, PSCI 1143, PSCI 1147, PSCI 1149, PSCI 1169
- SOCI 1170
- SPAN 1000, SPAN 1100, SPAN 1145, SPAN 1300, SPAN 2000, SPAN 2100, SPAN 2300
- THTR 1131, THTR 1160, THTR 2150
- WOST 2235

Goal 9: Ethical and Civic Responsibility

- CHEM 1040, CHEM 1145
- ECON 1000
- ENGL 1156
- HIST 2241, HIST 2242
- INFS 2510, INFS 2520
- JOUR 1000
- PHIL 1171, PHIL 1181
- PSCI 1101, PSCI 1102, PSCI 1110, PSCI 1111, PSCI 2000
- PSYC 2240, PSYC 2260
- SOCI 2155
- WOST 1101, WOST 2211, WOST 2213

Goal 10: People and the Environment

- BIOL 1136, BIOL 1137
- ENGL 1150
- GEOG 1102, GEOG 1104
- PHIL 2171
- PSCI 1137
- SOCI 1160
- WOST 2212

Graduation Requirements

MCTC confers three types of awards: associate degrees, diplomas and certificates. See MCTC Policies 3.03 and 3.05. In order to receive an award from MCTC, a student must:

- Complete the specific award requirements;
- Have a cumulative grade point average (GPA) of 2.0 or better for coursework completed at MCTC;
- Complete the intent-to-graduate process (see next column);
- Earn a specified number of credits from MCTC (see next column); and
- Meet all financial obligations.

See MCTC Policy 3.09 for additional information on graduation requirements.

Credit-Earning Options

Within the limitations of MCTC Policy 3.02, a student may earn credits toward an award and graduation by:

1. Successfully completing an MCTC course taken for credit;
2. Successfully completing an approved directed study proposal;
3. Transferring approved credits from another institution;
4. Earning credit by examination;
5. Completing some or all of the College Level Exam Program with sufficient scores;
6. Receiving required scores in some or all of the International Baccalaureate Program; and
7. Receiving required scores on Advanced Placement exams.

Intent to Graduate

Students intending to graduate must complete and submit an Intent-to-Graduate card to the Registrar's Office by the deadline indicated for that term on the College website. Cards are available in the Counseling and Advising Office or the Student Services Center. Students are strongly advised to meet with an approved College official and have their records reviewed. Students who fail to submit their cards by the published deadline will not receive information regarding the graduation ceremony and festivities.

Graduation applicants must have all graduation criteria submitted and completed within that term (transcripts from other colleges must be on file; "I" grades completed, etc.) to graduate in a given term.

Students must initiate a request to resolve a misprint or unissued award within one year of graduation.

Credits Earned at MCTC

As required by MCTC Policy 3.09, in order to receive an award from MCTC, a student must earn a minimum number of credits from MCTC as follows:

- 20 credits for students seeking an Associate in Fine Arts (A.F.A.), Associate in Science (A.S.) or Associate in Applied Science (A.A.S.) degree;
- 12 credits for students seeking an A.A. degree, and transferring from another Minnesota State Colleges and Universities institution or the University of Minnesota;
- 13 MnTC credits for students seeking the MnTC only; and
- One-third of the credits required for a diploma or certificate.

Catalog Requirements

Students may graduate either under the requirements in effect at the time the degree, diploma, or certificate is awarded or under the requirements in effect in any of the four previous academic years.

Students whose initial enrollment at MCTC was prior to fall 2001 semester may graduate under the requirements in effect at the time of their initial enrollment at MCTC.

Students must meet the requirements in one College catalog and may not combine requirements from more than one catalog.



Student Records

Student Grade Reports and Transcripts

Student academic records are maintained by the Registrar's Office through a computerized system. Transcript records show all coursework for which a student was registered during each term of enrollment and the grades and symbols awarded for that work. Grade reports will show only the grades for one term. Grade reports are not automatically mailed to students at the conclusion of a term, but are available online. Grade report requests must be submitted in writing to the Registrar's Office. See MCTC Policy 3.08A.

Transcript requests are processed through the National Student Clearinghouse for a fee.

Telephone, email and fax requests are not accepted. Requests will not be honored for students with overdue financial obligations to the College.

Students who plan to have a transcript sent to a Minnesota State College or University (MnSCU) do not need to complete a transcript request. All Minnesota State Colleges and Universities are able to access a student's MCTC transcript electronically. Students should contact the MnSCU institution they plan to attend for next steps.

Transcripts can be ordered online using any major credit card.

Mail Out Service:

Students may arrange to have an official transcript sent to whomever the student designates via an electronic request to the National Student Clearinghouse for a fee of \$5.00 per transcript.

To request an official transcript to be sent without using the National Student Clearinghouse, download the request form from the College's website and mail the completed request form along with payment of \$5.00 per transcript (check or money order) to the College. Credit card payment is not accepted with mailed requests.

Rush Service in Person Only:

Students may obtain an official transcript on the same day for a fee of \$5.00 per transcript and an additional service fee of \$5.00 at the Student Services Center. Transcripts can be ready in one hour. (Transcripts from the former Technical College may require a 24-hour turnaround time.)

Deans' Honor List

A student who completes 12 or more college-level credits in a semester with a semester GPA of 3.0 or greater will be included on the Deans' List. A letter of acknowledgement will be sent to each student on the list. Courses the student took pass/fail, withdrew from, audited or didn't complete are excluded.

Change of Address/Name

Students can update their address online at www.minneapolis.edu or may report an address change in person in the Student Services Center (T.2200).

Changes will also be accepted at MCTC's Aviation Center in Eden Prairie. Please be prepared to show positive photo identification at all locations.

Name changes must be reported to Student Services (T.2200) on the main campus downtown. Please be prepared to provide proper legal documentation verifying the change. Proper legal documentation includes a photo ID and at least one of the following: Marriage Decree, Divorce Decree, Court Order or Certificate of U.S. Citizenship.

Emergency Student Contact

MCTC will attempt to notify an enrolled student in the event of an extreme family emergency such as a death in the family, an injury requiring hospitalization or a similar type of emergency contact from a childcare facility. See MCTC Policy 4.07.

On-campus requests and telephone calls should be referred to the Counseling and Advising Office, 612-659-6700 during regular office hours. After-hours and weekend contact may be directed to Public Safety at 612-659-6900. The name of the person requesting the notification, his or her relationship to the student, the telephone number and a specific statement identifying the emergency must be provided in the message.

Due to scheduling issues and student attendance, the College cannot guarantee that the student will be notified of the emergency.

In accordance with data privacy, the location of the student, the student's class schedule and class attendance cannot be provided to the requesting person.

Residency Requirements

Minneapolis Community and Technical College does not make a distinction between resident and nonresident tuition rates for its students unless they are part of any of the recognized reciprocity agreements. Students who are attending under an existing reciprocity agreement or who are part of the Midwest Student Exchange Program are subject to the established rate of tuition for the state in which they reside. Reciprocity agreements are valid for the academic year in which they were granted.

Establishing Minnesota Residency:

Students who are non-Minnesota residents and are not part of a reciprocity agreement and wish to establish Minnesota residency status must update their records with the Registrar's Office. Students who have lived in Minnesota for one calendar year after admission to the College, are U.S. citizens or are lawfully present in the U.S. shall be eligible for Minnesota residency status.



College Offices and Services

Student Services

Office of Student Affairs

Student Affairs is comprised of the following services: advising, counseling, financial aid, *Student News*, student clubs and organizations, Registrar, Testing Center, admissions, multicultural student services, judicial affairs, disability services, TRIO programs, and career development services. The Division of Student Affairs also assists students who wish to use the grievance process to resolve concerns covered under the College's grievance policy. Questions and concerns about these areas may be brought to the attention of the Dean of Students.

Student Services Center

Staff from the Admissions, Financial Aid and Registrar's Offices personally assist students with questions in the Student Services Center (T Building, second floor skyway, Suite T.2200). Computers are available in the Student Services Center for online admission and course registration.

Admissions Office

The Admissions staff is responsible for admitting students to the College. The office is located in the Student Services Center. The Admissions Office:

- Processes student applications and sends out acceptance letters;
- Meets individually with prospective students to discuss educational plans, available programs and services, and the College's admission and application process;
- Accepts students into programs;
- Coordinates campus tours; and
- Coordinates campus enrollment outreach activities.

Registrar's Office

The Registrar's staff is responsible for maintaining and verifying academic records; supporting the registration process; overseeing graduation, as well as grades and pass/fail options; verifying enrollment; evaluating transfer credits and administering transcript requests. The office is located in the Student Services Center.

Financial Aid Office

The primary function of the Financial Aid Office is to help students obtain financial assistance to further their education. The office is located in the Student Services Center, and staff members are available to assist prospective and current students.

Business Services

Business Services staff process student tuition billings, payments and refunds. The staff also disburses student financial aid and scholarships and administers third-party billing for students. This office is located on the skyway level of the T Building (T.2700). Additional information and phone numbers are available at www.minneapolis.edu.

Counseling and Advising Office

Counselors and advisors within the Counseling and Advising Office (located in the T Building second floor, Suite T.2500) help students meet their individual goals. Services are offered in a variety of areas for both current and prospective students, including Academic Advising Services, Career Development Services, Counseling Services, International Student Services, Multicultural Student Services and Transfer Services.

Resource and Referral Services

MCTC connects students with resources to assist them with barriers that interfere with classroom success. Referrals are made to both on-campus services (counseling, academic advising and tutoring), and off-campus resources (housing, childcare, health care, transportation, legal aid, mental health counseling). The Director of Resource and Referral Services is located in the Counseling and Advising Suite (T2500).

MCTC Campus Card

The MCTC Campus Card is a multi-function card that serves as your student, faculty, and staff ID as well as a declining balance debit card that can be used to pay for purchases in the MCTC Bookstore, Sodexo Dining Services, and MCTC and Metropolitan State parking facilities in Minneapolis and St. Paul. This card also provides access to College resources in the MCTC Library and Computer Lab. Students, faculty, and staff may only possess one card. This card is valid as long as the person is registered student or active employee. Cards must be surrendered on demand from the College.

Power of YOU

Students who have graduated from a Minneapolis or Saint Paul public high school in spring 2010 and who are residents of either Minneapolis or Saint Paul, may be eligible to participate in the *Power of YOU* program. For more information about *Power of YOU*, call 612-659-6727.

Testing Center

The Testing Center administers placement tests and retests to students, as well as instructor-arranged course tests. Placement tests and the resulting course placements determine appropriate starting points for students and are intended to increase the likelihood of College success. Schedules for testing are published each term and can be obtained from the Counseling and Advising Suite, Student Services Center or the Testing Center. Hours for both placement testing and instructor-arranged testing are posted at the Testing Center, are recorded on the Testing Center Information Line at 612-659-6262 and are also available on the College's website. Students wishing to take an instructor-arranged course test, must make arrangements with their instructor to have the exam delivered to the Testing Center. Picture identification is required for all testing.

The Testing Center also proctors paper-and-pencil exams for other postsecondary institutions. Please call the Testing Director at 612-659-6260 for further information and required fees.

Instructional Services

Office of Academic Affairs

The Office of Academic Affairs (located on the skyway level of the T Building, T.2300) consists of the offices of the departmental deans, judicial affairs and support staff. This office addresses student concerns related to instructional services. The approval of the departmental dean is required:

- To add or withdraw from a course after the deadline;
- For a waiver of requirement;
- For directed study proposals; and/or
- To take a credit by examination.

The Office of Academic Affairs can be reached at 612-659-6100 and is open Monday–Thursday, 8:00 a.m.–6:00 p.m. and Friday, 8:00 a.m.–4:30 p.m.

Contacting Faculty

Each instructor at the College has an assigned office, phone number and email address. Every instructor's office hours are published in the course syllabus and posted on the respective instructor's office door. It is recommended, however, that students discuss with the instructor their preferred method of contact. Information on the location of faculty offices, phone numbers and email accounts is available in the online directory, at the Student Services Center or the Office of Academic Affairs.

Library

The MCTC Library is open Monday through Saturday during the regular academic year. A reference librarian is available to assist students during normal library hours. A valid Student ID is required to check out materials from the library and to use reserve materials for courses. The library provides access to a multilibrary online database, numerous full-text periodical databases and the Internet. Library databases are also available to search from off campus via the library's proxy server. The library collection includes books, reference materials, periodicals, newspapers, videotapes, DVDs and magazines. Items not found in the MCTC Library can be requested from other libraries in the state through interlibrary loan. Course reserve materials are available for use at the circulation desk.

College Computer Services

Currently enrolled students may use the computers in any of the College's Open Computer Labs for college coursework. PC-based Open Computer Labs are located in rooms T.3200 and L.1300. The labs are open throughout the term, including day, evening and Saturday hours. Official lab hours are posted online at www.minneapolis.edu/techsupport/computerlabs.cfm.

Bookstore

The MCTC Bookstore is located on the plaza (street) level of the T Building (T.1800). Bookstore hours are 8:00 a.m.–6:00 p.m. Monday–Thursday and 8:00 a.m.–4:30 p.m. on Friday. Students are encouraged to avoid lines by purchasing textbooks and supplies online at www.mctcbookstore.com.

For questions pertaining to online orders or to pick up your processed order, visit the bookstore e-commerce department in T.2050. Hours of operation are Monday–Thursday, 7:30 a.m.–8:00 p.m.; Friday, 7:30 a.m.–4:00 p.m.; and Saturday, 8:00 a.m.–noon. For a demonstration of how to purchase books online, visit the bookstore.

When purchasing textbooks, students should have their registration form listing courses, course numbers and course sections. Students may charge books against financial aid for classes for which they are registered, during the time period published in the class schedule; however, students receiving funding from agency programs (e.g. D.R.S., JTPA) must have an official agency document on file in the bookstore. Students should refer to their financial aid award packets and term class schedules for more information. Used textbook buy-back takes place at the beginning and end of every term. Times and dates are advertised on campus.

Educational Support Services

Advising Services

Advising staff specialize in assisting students in course selection and degree-planning services:

- *Course selection services*—Meet with an advisor to review program information in the College catalog and class schedule to select the courses that are right for each student; and
- *Degree-planning services*—Meet with an advisor who helps students plan out their degrees and answers any questions they may have.

Advising staff also work closely with counseling faculty to provide appropriate referrals for personal, social and psychological issues, and to act as liaisons among students, faculty and staff. Advising Services is located in T.2500.

Counseling Services

Current counseling services include:

- *Academic Counseling*: To help students who are faced with decisions or problems regarding their educational future.
- *Career Counseling*: To help students make decisions about career choices by providing information and assessments to help them evaluate their interests, values, and abilities as they relate to College programs and careers.
- *Personal Counseling*: To help students with social or emotional adjustment by providing an opportunity to explore problems and possible resolutions.
- *Group Counseling*: Arranged for students wishing to participate. The purpose of a group is to explore a concern common to all members of the group or to help a group member become aware of alternatives, related to that concern, that may not have been considered. Individuals wishing to participate in a group experience should contact the dean of students (T.2500).

International Student Services

Counseling and advising services are provided to nonimmigrant (F-1) international students. An informational program for new international students is also provided. Information and guidance about English language study opportunities; educational, social, personal and financial matters; visa issuance; and immigration regulations are available. The International Student Advising staff also serves as official Minneapolis Community and Technical College contact persons for the United States Citizenship and Immigration Services (USCIS) and the United States Immigration and Customs Enforcement (ICE). Persons with questions about international student admissions should refer to the International Student Admissions Requirements

in this catalog. Prospective and enrolled students should contact the Counseling and Advising Office to obtain counseling, advising and F-1 immigration processing services. The phone number of that office is 612-659-6700.

Multicultural Student Services

MCTC strives to create and maintain a climate in which students of diverse ethnic groups can succeed throughout their College experience. Multicultural Student Services serves all students, with a focus on American Indian; African and African-American; Chicano, Latino and Hispanic; Asian-American; and ESL students. MSS staff can be found in the Counseling and Advising Office (T.2500).

Veterans Services Office

The Veterans Services Office provides counseling and referrals for veterans. Office staff will help veterans with applications for GI Bill benefits, academic counseling, tutorial assistance or the VA work-study program. The office has listings of community organizations that will help veterans with housing, food, shelter and medical problems.

Veterans Welcome Center

The new Veterans Welcome Center is located on the second floor of the Helland Center in room H.2300. It is open to all veterans, their family members and escorted guests, from 9:00 a.m.–5:00 p.m., Monday–Friday. Computers are available as well as a TV and kitchenette. Come meet other veterans, study, relax and get the most recent information on veteran programs and benefits.

Learning Center

The Learning Center provides academic support (but not initial instruction) to all MCTC students. The Center's goal is to help students succeed in college by providing the following services:

- Essential skills tutoring in math, reading and writing courses;
- Assistance in study skills such as time management, textbook and/or technical manual reading, note taking, and test taking;
- Peer tutoring in liberal arts, technical and vocational courses;
- Computer programs (many multimedia) in basic skills and in some vocational and liberal arts courses;
- In-class tutoring in some courses;
- Study groups for many liberal arts and technical/occupational courses;
- Class presentations on learning styles, study skills, textbook and/or technical manual reading, and writing;
- Online tutoring services through Smarthinking; and
- Supplemental instruction.

In cooperation with Disability Services, the Learning Center offers the following to students:

- Equipment modification;
- Curriculum modification;
- Accommodations; and
- Instructional aids and devices.

Disability Services

MCTC is committed to making education equally accessible to all students. Disability Services provides services to assist people with physical, learning, or psychological disabilities to access the programs, services, and activities of MCTC. Disability Services works with students to determine the accommodations needed and to develop a plan for providing appropriate accommodations. Reasonable accommodations are provided to ensure access to all College courses, programs, services, jobs, activities, and facilities, including those that are off-site, such as field trips, internships and field work.

Disability Services provides or arranges for a variety of auxiliary services for the College, including sign language interpreting, document conversion, assistive technology, special testing arrangements and academic assistance. Students with disabilities are also offered information, referrals, advocacy, study skills assistance, advising and other individualized services that may be needed for equal access to campus. Contact Disability Services at 612-659-6730 (Room T.2400) or visit the campus website for more information. Students are encouraged to meet with a Disability Services advisor at the beginning of the enrollment process and are responsible for meeting with a Disability Services advisor each term to plan accommodations.

Students and guests may contact Disability Services if accommodation is needed to participate in MCTC programs, services and activities. Examples include: sign language interpreter services and alternative format for printed material.

Campus Accessibility

The MCTC campus is designed to meet the needs of disabled students. Elevators have Braille signage, accessible restrooms are available in each building, entrances and exits are designed to accommodate a standard wheelchair, and electronically controlled doors are located at public entrances. Public telephones are installed for wheelchair access, and TTY phones are available in various locations on campus. The Disability Services Office has information on TTY access.

Handicapped parking spaces are located in the MCTC parking ramp. Proper identification must be displayed on the vehicle.

Bus stops are convenient to the campus, and some routes provide wheelchair access.

Students who use Metro Mobility may be dropped off and picked up at the Hennepin Avenue entrance of the T Building. Specify 1415 Hennepin Ave. as the address when scheduling rides.

Educational Opportunity Center

The Educational Opportunity Center (EOC) offers educational opportunities to an adult urban population of diverse ethnic and socioeconomic backgrounds. EOC provides information to assist adults with choosing and enrolling in a variety of postsecondary education options.

Services include:

- Academic, financial aid and career information;
- Assistance with financial aid applications and applications for admission to colleges and universities;
- Workshops on financial aid and college selection;
- Career decision-making; and
- Referrals to community resources.

Services are provided metro-wide in a number of community agencies. Call 612-659-6543 for locations and/or further information and eligibility requirements.

High School Upward Bound

High School Upward Bound is an academic support program for high school students. It provides counseling, academic courses, and supportive services to ensure successful completion of high school, as well as selection and completion of postsecondary education. High School Upward Bound provides:

- Academic, vocational and career counseling;
- Tutoring;
- A six-week academic program held on campus during the summer;
- Assistance to parents in matters affecting the student's educational progress;
- Financial aid information and parent workshops; and
- Field trips and cultural and recreational activities.

Starting Point

Starting Point is a Student Support Services (SSS)/TRIO program for students who are low-income, the first in their family to attend college or have a disability. Starting Point's goal is to ensure students are successful in college. All services are free and include academic, career and transfer advising; referrals; tutoring; unique classes and workshops; and cultural activities designed to enhance academic and personal success. Enrollment is open to a limited number of MCTC students. For further information about Starting Point, contact the program secretary at 612-659-6565.

Talent Search

Talent Search is a comprehensive outreach and referral program providing academic, vocational, career and financial aid information to eligible people in the Twin Cities area. Program services include academic, vocational and career information; referral for GED preparation and testing; interest, vocational and academic testing; financial aid information; and assistance in completing forms. Services are provided free of charge.

Veterans Upward Bound

Veterans Upward Bound (VUB) is an academic support program for veterans in need of a GED or refresher courses before attending a liberal arts or technical college. Program services include tutoring and instruction in math, writing, reading, computer literacy skills, science and foreign languages. GED preparation is offered, as well as academic assessment, personal counseling, career and vocational assessment, and financial aid information. All services are free to qualified veterans. Additionally, veterans may utilize their GI Bill while attending VUB classes.

Women's Upward Bound

The Student Services portion of the College's Women's Studies Program is Women's Upward Bound. Services for women include transfer advising, personal counseling, and referral to community services such as Chrysalis Center for Women, Harriet Tubman Battered Women's Shelter, Minnesota Indian Women's Resource Center, the Minnesota Sexual Violence Center, and the Minnesota Women's Consortium. Women's Studies faculty participate in the yearly International Women's Day celebration in March. This event is a resource fair and conference sponsored by the Women's Human Rights Project of Minnesota, Advocates for Human Rights and colleges throughout the Twin Cities. Students and faculty also attend events sponsored by the National Women's Studies Association and the Institute for Women's Policy Research.

Career Development Services

Career Development Services are available in the Counseling and Advising Office (T.2500). Because it is a lifelong process and not a one-time event, career decision-making and planning takes time, energy and commitment. Students at Minneapolis Community and Technical College are encouraged to develop an understanding of how knowledge about the world of work combined with self-awareness can be incorporated into making both academic and career choices. Counselors and advisors support students in their career decision-making throughout their enrollment at MCTC. Assessment tools are available to assist students in exploring their values, skills, and interests, and in learning about the diverse and varied opportunities available in the working world.

Job Listings

MCTC provides a Web-based employment site for students and alumni to use to search and apply for off-campus employment. Students are responsible for activating and maintaining their job bank account. MCTC assumes no responsibility for the conditions or terms of advertised employment.

Student Life

Campus Safety and Security

Public Safety serves as a critical support function to the College community. Public Safety officers on campus are authorized to take appropriate action to ensure the safety and security of all students, faculty, staff, and visitors. MCTC Public Safety officers are employed by the College and are trained on an annual basis to effectively respond to and resolve incidents on campus in a positive manner. There may be occasions wherein Public Safety officers' response and incident resolution may be augmented by local police, fire and ambulance response units. **The Public Safety Department may be reached by dialing 612-659-6900 for emergency situations**, and 612-659-6910 for nonemergencies. Escort service within the campus boundaries, including parking facilities, is available upon request any time the campus is open.

Parking

The MCTC parking ramp is connected to the campus via the Hennepin Avenue skyway. The ramp is normally open 7:00 a.m.–10:00 p.m., Monday–Thursday; 7:00 a.m.–6:00 p.m., Friday; and 7:00 a.m.–2:00 p.m., Saturday. For convenience, access cards may be purchased from the MCTC Bookstore. Students must also register the vehicle(s) they park in the ramp. Registration is done online. For more information, contact the Public Safety Office at 612-659-6910. Vehicles without permits may be subjected to towing. Minimum clearance in the parking ramp is six feet, eight inches. Free bicycle and motorcycle parking is available near the Helland Center.

An escort service is also available by calling the Public Safety Office at 612-659-6910.

Parking Access Card

For convenience, students are encouraged to purchase an access card. These cards provide quick access to the ramp at a reduced rate and can be purchased at the Bookstore, T.1800.

Housing

MCTC has no student housing. Students are responsible for the research and selection of proper housing. Neighborhood housing is available within walking distance of Minneapolis Community and Technical College. Housing information can be found in the *Star Tribune* newspaper (Twin Cities edition).

MCTC assumes no responsibility for the conditions or terms of advertised housing.

Insurance

MCTC does not provide health or accident insurance for students and, therefore, assumes no responsibility for their medical expenses. However, group medical and accident insurance policies specifically designed for students are available from a private company. Brochures describing the plan, including an application for insurance, can be obtained from the Counseling and Advising Office (T.2500) or Student Life (H.2030). Insurance is available for United States residents and a separate plan is available for international students on an F-1 visa.

Student Organizations

MCTC strives to meet students' needs by recognizing a variety of co-curricular activities. If there are activities not listed that students would like to see on the campus, please contact the director of Student Life (H.2030) to discuss the possibility of initiating such activities.

Clubs and Activities

The College sponsors a variety of clubs, activities and support groups. Examples include:

- ABC — Association of Black Collegiates
- Addiction Counseling Club
- Apparel Technologies Student & Alumni Association
- Asian Student Association
- Bike Collective
- Christian Group
- *City College News* (Student Newspaper)
- Chicanos Latinos Unidas (Chicano/Latino/Hispanic)
- Ethiopian Students Club
- French Club
- Inspirational Gospel Choir
- International Student Association
- Leaders of Tomorrow Club
- Math Club
- Media Generation
- Muslim Student Association
- Network Security Unleashed
- Oromo Student Organization
- Phi Theta Kappa Honor Society
- Polysomnography
- Raising Student Voices
- Recreation & Leisure
- Science Club
- Science Fiction & Fantasy Club

- Sisters for Social Justice (and Brothers, Too!)
- Skills USA
- Soccer Club
- Somali Student Association
- Student Nurses Association
- Student Senate (College Student Association)
- Student Veterans of America — MCTC Chapter
- Three-Legged Frog (Environmental Group)
- UNITE — United Nations of Indian Tribes for Education
- Wellness Advocates for You (WAY)

Membership in organizations is open to any interested student. Any person or group interested in forming a new club can meet with the director of Student Life department. There is a process for formal recognition and funding of all student organizations.

Theatre Arts

The Theatre Department at the College offers many opportunities for students to experience excellent live theatre as audience members, participants in the production process and performers. Each academic year, Theatre on the Park (MCTC's theatre in the Whitney Fine Arts Center) produces two to three major productions from various styles, cultures and periods of theatre history. The Theatre Department often brings to campus professional theatre productions and guest artists from the Twin Cities performance arts community. The Theatre Department is committed to providing its multicultural student body with aesthetic and technical training in the theatre arts. The Theatre offices are located in the Fine Arts Suite (F.1300) of the Whitney Fine Arts Center.

Music Ensembles

The Music Department provides several opportunities for MCTC students, each offering one credit and giving students a chance to be involved in at least one public performance per semester. The College Choir explores a wide variety of music styles and is open to all who enjoy singing. The Vocal Ensemble is for more experienced choral singers and is open by audition or permission of the director. The Jazz Ensemble plays and improvises in the many styles appropriate to the jazz combo format. Openings are filled by audition. Other small instrumental ensembles are formed each semester to play music from the Western classical repertoire. Contact the director of Student Life for more information.

Phi Theta Kappa (PTK)

Phi Theta Kappa is a national honor society for community and technical college students. It was formed to recognize and encourage academic excellence. The Alpha Epsilon Sigma Chapter at MCTC was chartered in 1979. To be eligible for membership in Phi Theta Kappa, a student must be enrolled at MCTC, have completed 12 or more MCTC college-level credits and have a GPA of at least 3.3. Membership details are available in H.2010.

Recreation and Leisure Activities

Students may use the racquetball courts, weight room and open gym during posted times. All activities in these areas are self-directed. Students will need a picture ID for admission into these areas.

Noncredit aerobic dance classes are also offered and include training that leads to certification as an aerobic dance instructor.

Student Ambassadors

Student ambassadors assist students in becoming acquainted with the College and support Student Life and its various programs and services. The student ambassadors provide leadership for the campus community, and they are effective role models for MCTC students.

Student Newspaper

The student newspaper, *City College News*, is staffed by students and presents news, features, photographs, and viewpoints that the newspaper staff feels will interest and aid their peers. The newspaper gives students, regardless of background or experience, the opportunity to gain experience in producing a student publication.

Office of Student Life

This office provides direction and support for recognized student organizations, opportunities for student leadership development and a wide variety of Student Life activities designed to complement the academic goals of the College. This office fosters an environment that values differences, freedom of expression, and the holistic development of students. The Office of Student Life is located in H.2030.

Student Senate

The campus student association is the MCTC Student Senate, which is affiliated at the statewide level with the Minnesota State College Student Association (MSCSA).

The Student Senate is responsible for making recommendations to charter student clubs and organizations at the College. It appoints representatives to serve on the Student Life Budget Committee and College Committees, and ensures student involvement in the decision-making processes of the College. It represents the student body in working with the faculty and administration toward achieving common goals. Through the MCTC Student Senate, all students are represented by the voting members who act on their behalf. The Student Senate Office is located in H.2010.

Boynton Health Service

Boynton Health Service provides primary care and “quick clinic” services on the MCTC campus. Boynton services include treatment for common illnesses and health conditions, routine preventive maintenance exams, vaccinations, health assessments and acute care. Services are provided at no cost to currently enrolled MCTC students and paid for through Student Life fees.



Programs and Credentials

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Articulation Agreements

The following MCTC programs have articulation agreements with other colleges and universities. See www.mntransfer.org for further details.

MCTC Program	MCTC Degree	Transfer Institution	Program	Degree
Accounting Technician	A.A.S.	Metropolitan State University	Organizational Administration	B.A.S.
Addiction Counseling	A.S.	Metropolitan State University	Alcohol and Drug Counseling	B.S.
Administrative Assistant/ Software Support Specialist	A.A.S.	Metropolitan State University	Organizational Administration and Technology	B.A.S.
Air Traffic Control	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Air Traffic Control	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Apparel Technologies	Diploma	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Architectural Technology	Diploma	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Associate Degree, Diploma and Certificate programs		St. Mary's University School of Graduate and Special Programs	Bachelor of Science Degree Completion Programs	
Associate in Applied Science, Associate in Science	A.A.S. A.S.	Cardinal Stritch	College of Business (Management, Business Admin., Strategic Mgmt. of Info Systems, Human Services Mgmt.)	B.S.
Associate of Arts or Science Degree, Associate of Applied Science		Capella University	Bachelor's Completion Programs	
Associate of Fine Arts: Theatre Arts	A.F.A.	Metropolitan State University	Theatre	B.A.
Associate of Fine Arts: Visual Arts	A.F.A.	Minnesota State University, Mankato	Fine Arts	B.F.A.
Associate of Fine Arts: Visual Arts	A.F.A.	Minnesota State University, Mankato	Art	B.A.
Associate of Fine Arts: Visual Arts	A.F.A.	Minnesota State University, Mankato	Art Education	B.S.
Aviation Technician	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Aviation Airframe Technician	A.A.S.	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Aviation Powerplant Technician	A.A.S.	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Biology	A.S.	St. Cloud State University	Biology (all majors)	B.S.
Biotechnology	A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Biotechnology	A.S.	St. Cloud State University	All Biology Majors	B.S.
Biotechnology	A.S.	St. Cloud State University	Biotechnology and Biology (all majors)	B.S.
Business Management	A.S.	Metropolitan State University	Business Administration	B.S.
Chemistry	A.S.	St. Cloud State University	Chemistry (all majors), Biochemistry, Chemistry Teaching	B.S.
Child Development	A.S.	Metropolitan State University	Early Childhood	B.A.S.
Child Development	A.S., A.A.S.	Metropolitan State University	Psychology	B.A.
Child Development	A.S.	University of Wisconsin	Early Childhood	B.A.S.
Child Development	A.A.S.	Southwest Minnesota State University	Early Childhood	B.A.S.
Child Development	A.S., A.A.S.	Metropolitan State University	English, Life Science, Math, Social Studies and Urban Elementary Teaching	B.S.
Cinema Studies	Certificate	Augsburg College	Film	B.A.
Cinema Production	Certificate	Augsburg College	Film	B.A.
Computer Forensics	A.A.S.	Metropolitan State University	Computer Forensics	B.A.S.
Computer Forensics	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Computer Support Network Administration	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Construction Electricity	Diploma	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Criminal Justice Studies	A.A.S.	Metropolitan State University	Criminal Justice	B.A.
Culinary Arts	A.A.S.	Metropolitan State University	Hospitality Management	B.A.S.

MCTC Program	MCTC Degree	Transfer Institution	Program	Degree
Directing and Producing	A.S.	Augsburg College	Film Performance	B.A.
Directing and Producing	A.S.	Augsburg College	Film Production	B.A.
Editing and Postproduction	A.S.	Augsburg College	Film Production	B.A.
Education	A.S.	Metropolitan State University	Urban Elementary Teacher Program	B.S.
Education	A.S.	Minnesota State University, Moorhead	English, Life Science, Math and Social Studies Teaching Special Education	B.S.
Graphic Design and Visual Communication	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Graphic Design and Visual Communication	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Heating and Ventilation	Diploma, A.A.S.	Minnesota State University, Moorhead	Industrial Technology—	B.S.
Air Conditioning and Refrigeration		Ferris State University	General Technology—HVAC	B.S.
Homeland Security Specialist	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Human Services	A.S.	Metropolitan State University	Human Services	B.A.
Human Services	A.S.	Metropolitan State University	Alcohol and Drug Counseling	B.A.
Industrial Management	Diploma, A.S., A.A.S.	University of Wisconsin, Stout	Industrial Management	B.S.
Information Assurance	Certificate, Diploma	Metropolitan State University	Information Assurance	B.A.S.
Information Technology—Computer Programming	A.A.S.	College of St. Scholastica	Computer Science/ Information Systems	B.A.
Information Technology—Computer Programming	Diploma, A.A.S.	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Information Technology—Computer Support and Network Administration	A.A.S.	College of St. Scholastica	Computer Science/ Information Systems	B.A.
Information Technology—Computer Support and Network Administration	Diploma, A.A.S.	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Law Enforcement	A.S.	Metropolitan State University	Law Enforcement	B.S.
Machine Tool Technologies	Diploma	Minnesota State University, Moorhead	Industrial Technology— General Technology	B.S.
Mathematics	A.S.	University of Minnesota Minnesota State University, Moorhead Metropolitan State University	Mathematics	B.A. or B.S.
Nursing	A.S.	Minnesota State Universities	Nursing	B.S.N.
Office Information Processing Specialist	A.A.S.	Metropolitan State University	Organization Administration and Technology	B.A.S.
Photography and Digital Imaging	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Photography and Digital Imaging	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Psychology	A.A.	Argosy University	Psychology	B.A.
Screenwriting	A.S.	Augsburg College	Film Performance	B.A.
Screenwriting	A.S.	Metropolitan State University	Screenwriting	B.A.
Software Development	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Sound Arts	A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Video Digital Media	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Web Design	A.A.S.	Metropolitan State University	Individualized Bachelor's Degree	B.A.
Web Design	A.A.S.	Minnesota State University, Moorhead	Operations Management	B.S.
Women's Studies	Certificate	Metropolitan State University	Women's Studies	B.A.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Programs

Accounting

- Accounting Technician A.A.S. Degree—60 credits
- Accounting Clerk Certificate—29 credits
- Accounts Payable/Receivable Certificate—16 credits
- Payroll Accounting Certificate—14 credits

What You Will Learn

MCTC's Accounting programs will prepare you to use software to document original transactions and maintain records such as bank accounts, merchandise inventories, accounts receivable, accounts payable, and payroll for various organizations.

The program offers five certificate credentials and an Accounting Technician A.A.S. degree. The certificate coursework will introduce you to the principles of accounting, business communication, problem-solving and accounting math.

The A.A.S. coursework will include the additional topics of cost accounting, critical thinking, intermediate accounting, and interpretation and analysis of financial information.

You will have the opportunity to learn journal entry preparation, financial statement preparation, computerized accounting systems using Peachtree and QuickBooks software, and electronic spreadsheets using Microsoft Excel. You also will learn 10-key operation by touch.

Experienced instructors will assign you real-world accounting challenges to resolve and will encourage you to work in teams, similar to those formed in the workplace.

The Accounting Clerk program is the first level in the program; all Accounting Clerk coursework applies toward the more advanced Accounting Technician program.

Where You Could Work

- Small and medium-sized businesses
- Government agencies
- Nonprofit organizations

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or have been placed into READ 0200 or received placement/faculty recommendation into ESOL 0052.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test score.

Accounting Technician A.A.S. Degree

Not all courses are offered every semester. Credits: 60

Courses in this program require achievement of the following program admission requirements:

Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; Placement into MATH 0070 or completion of MATH 0060.

First semester courses will generally be selected with the assistance of a counselor or advisor. Students are encouraged to use these services for planning beyond the first semester. Recommended course sequence below:

First Semester

Course #	Course Name	Credits
BUSN 2202	Financial Accounting	4.00
ACCT 1222	Business Math	3.00
BUSN 1140	Introduction to Business	3.00
ACCT 1215	Accounting Cycle	1.00
ENGL 1110	College English 1	3.00

Second Semester

Course #	Course Name	Credits
ACCT 1230	Payroll Accounting	3.00
ACCT 1261	Spreadsheets for Accounting	4.00
ACCT 1270	Computerized Accounting – QuickBooks	2.00
SPCH 1010	Interpersonal Communications	3.00
BTEC 2375	Written Business Communications	3.00
OR		
BTEC 1154	Business Communications	3.00

Third Semester

ACCT 1280	Income Tax	3.00
ACCT 2230	Intermediate Accounting 1	4.00
BUSN 2224	Managerial Accounting	4.00
ACCT 1272	Computerized Accounting – Peachtree	2.00
General Education MnTC Goal Areas 7, 8, 9 or 10		3.00

Fourth Semester

ACCT 2240	Intermediate Accounting 2	4.00
ACCT 2290	Accounting Technical Review	2.00
Program electives: Business or Accounting		3.00
General Education electives		6.00

Suggested Business and/or General Elective courses

(Listed below are additional suggested elective courses to fulfill the remaining three program credits.)

Course #	Course Name	Credits
BUSN 1142	Principles of Marketing	4.00
BUSN 2252	Principles of Management	4.00
BUSN 2260	Legal Environment of Business	4.00
ECON 2000	Principles of Macroeconomics	3.00
ECON 2200	Principles of Microeconomics	3.00
MATH 1110	College Algebra	4.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

General Education Electives (15 credits)

The Accounting Technician A.A.S. degree requires that students successfully complete SPCH 1010 and ENGL 1110 (Goal Area 1) as listed. Nine additional credits of general education coursework are required from at least two other MnTC Goal Areas, with a minimum of three credits from Goal Areas 7, 8, 9 or 10.

Accounting Clerk Certificate

Not all courses are offered every semester. Credits: 29

Courses in this program require achievement of the following program admission requirements:

Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

First semester courses will generally be selected with the assistance of a counselor or advisor. Students are encouraged to use these services for planning beyond the first semester.

Introductory Courses

(Listed below are courses we suggest students choose from for their first semester.)

Course #	Course Name	Credits
BUSN 2202	Financial Accounting.....	4.00
ACCT 1222	Business Math	3.00
BTEC 1060	Keyboarding.....	3.00
ACCT 1215	Accounting Cycle.....	1.00
ENGL 1110	College English 1.....	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ACCT 1230	Payroll Accounting.....	3.00
ACCT 1260	Spreadsheets for Accounting.....	4.00
ACCT 1262	Computerized Accounting – Peachtree .	2.00
OR		
ACCT 1270	Computerized Accounting – QuickBooks .	2.00
SPCH 1010	Interpersonal Communications.....	3.00
BTEC 2375	Written Business Communications.....	3.00

General Education Electives (6 total credits)

The Accounting Clerk Certificate requires that students successfully complete ENGL 1110 and SPCH 1010 as listed above.

Accounts Payable/Receivable Certificate

Not all courses are offered every semester. Credits: 16

Courses in this program require achievement of the following program admission requirements:

Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

First semester courses will generally be selected with the assistance of a counselor or advisor. Students are encouraged to use these services for planning beyond the first semester.

Introductory Courses

(Listed below are courses we suggest students choose from for their first semester.)

Course #	Course Name	Credits
BUSN 2202	Financial Accounting.....	4.00
ACCT 1222	Business Math	3.00
BTEC 2375	Written Business Communications . . .	3.00
ACCT 1215	Accounting Cycle.....	1.00
SPCH 1010	Interpersonal Communications	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ACCT 1262	Computerized Accounting – Peachtree . .	2.00
OR		
ACCT 1270	Computerized Accounting – QuickBooks .	2.00

General Education Electives (3 total credits)

The Accounts Payable/Receivable Certificate requires that students successfully complete SPCH 1010 as listed above.

Payroll Accounting Certificate

Not all courses are offered every semester. Credits: 14

Courses in this program require achievement of the following program admission requirements: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; Placement into MATH 0070 or completion of MATH 0060

First semester courses will generally be selected with the assistance of a counselor or advisor. Students are encouraged to use these services for planning beyond the first semester.

Course #	Course Name	Credits
BUSN 2202	Financial Accounting.....	4.00
ACCT 1230	Payroll Accounting	3.00
BTEC 2375	Written Business Communications . . .	3.00
ACCT 1215	Accounting Cycle.....	1.00
SPCH 1010	Interpersonal Communications	3.00

General Education Electives (3 total credits)

The Payroll Accounting Certificate requires that students successfully complete SPCH 1010 as listed above.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Addiction Counseling

- Addiction Counseling A.S. Degree—68 credits
- Addiction Counseling Diploma—41 credits

***NOTE: As of July 1, 2008, minimum qualifications for licensure have changed. Bachelor's degrees in any field and MCTC diploma requirements will be required for permit licensure. An associate degree in Addiction Counseling will allow graduates to apply for a temporary permit to work in the field for no more than five years until a bachelor's degree is obtained.**

The COUN Program requires:

- Grades of "C" (2.0) or above in all COUN theory courses,
- Pass (P) grades in the internship and seminar courses.
- **Passing of a criminal background check prior to being placed in a COUN internship.**

The College cannot guarantee placement in internships for students who do not have a clear criminal background check. If you have questions about your eligibility, please consult a COUN instructor before beginning the program or, at the latest, when beginning COUN 2510: Introduction to Addictionology.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Addiction Counseling A.S. Degree

Credits: 68

This A.S. degree is designed for persons without a degree.

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
COUN 2510	Introduction to Addictionology.	3.00
COUN 2530	Counseling Skills	3.00
ENGL 1110	College English 1	3.00
General Education Courses (see below)		6.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ENGL 1111	College English 2.	3.00
COUN 2520	Psychopharmacology	3.00
COUN 2620	Assessment and Interviewing.	3.00
COUN 2630	Case Management and Legal and Ethical Standards.	3.00
COUN 2640	Group Counseling	3.00
COUN 2700	Internship 1	9.00
COUN 2710	Internship Seminar 1	1.00
COUN 2800	Internship 2	9.00
COUN 2810	Internship Seminar 2	1.00
General Education Courses (see below)		21.00

First semester students should meet with Addiction Counseling faculty for program courses and Advising staff for MnTC general education credits.

Students are accepted into this program fall and spring semesters only.

General Education Courses (30 credits)

To complete the Addiction Counseling A.S. degree, students are required to successfully complete 30 credits of general education coursework. This coursework must be selected from at least six of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are required are ENGL 1110 and ENGL 1111, and SPCH 1010 (recommended) (satisfy Goal Area 1).

Addiction Counseling Diploma

Credits: 44

This Diploma is designed for persons that already have an advanced degree. **Passing a criminal background check is required prior to internship placement.** The College cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Introductory Courses

Course #	Course Name	Credits
COUN 2510	Introduction to Addictionology.	3.00
COUN 2520	Psychopharmacology	3.00
COUN 2530	Counseling Skills	3.00
General Education Courses (see below)		3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
COUN 2640	Group Counseling	3.00
COUN 2700	Internship 1	9.00
COUN 2710	Internship Seminar 1	1.00
COUN 2800	Internship 2	9.00
COUN 2810	Internship Seminar 2	1.00
COUN 2620	Assessment and Interviewing.	3.00
COUN 2630	Case Management and Legal and Ethical Standards.	3.00
General Education Courses (see below)		3.00

Students should meet with Addiction Counseling staff prior to registering.

General Education Courses (6 credits)

To complete the Addiction Counseling Diploma, students are required to successfully complete six credits of general education coursework. You can request transfer of advanced degree general education courses to satisfy these credits. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1.

Courses in these programs require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Air Traffic Control

- Air Traffic Control A.A.S. Degree—60 credits

What You Will Learn

MCTC's Air Traffic Control Training program will prepare you in skills related to the aviation industry and to meet minimum standards for eligibility to enter the Federal Aviation Administration (FAA) air traffic control career field. You will start by learning basic aviation terms and how weather conditions are applied and interpreted in the aviation environment. Additional coursework will teach you to use the necessary rules and procedures to direct the safe, orderly and expeditious flow of air traffic in the different air traffic facilities in the National Airspace System, including terminal and en route center environment. You will study valuable human factors related to the career field and learn individual and group problem-solving techniques during complex air traffic control exercises. These will enable you to make sound decisions no matter what the situation. You will receive extensive hands-on training to operate the computer and radar system in use today by the National Airspace System.

MCTC's three-semester program is an FAA-approved Collegiate Training Initiative (CTI) program specifically designed to offer students foundational air traffic control training and general aviation education.

Graduates of this program must meet FAA requirements, be U.S. citizens, meet the FAA age restriction and provide proof of meeting FAA ATCS medical standards (e.g. Class II medical certificate). FAA requires all students to take and receive a satisfactory score on the FAA preemployment examination, pass a security background screen and obtain a College advisor's recommendation.

Where You Could Work

- Government and military aviation facilities
- Airports
- Regional and major airlines

How You Apply

For detailed information, visit www.minneapolis.edu/airtrafficcontrol/ or call 1-800-475-2828. In addition to College/ATC applications, program assessment is required.

Students entering the in-residence program (one year duration) must meet the following requirements: (1) They must take the air traffic control Aptitude Test and score 40 or higher. (See program admissions for details); (2) They must have completed the following online aviation courses from MCTC or approved courses from another accredited institution.

- Introduction to ATC—3 credits;
- Introduction to Aviation Weather—3 credits; and
- Aviation Knowledge—3 credits
- Aviation Law—3 credits

Transfer students with a B.S./B.A. degree must meet the 18 general education credit requirement.

A maximum of 64 students for the full ATC program are accepted. The three-semester program begins summer term.

For complete program entry requirements, visit www.minneapolis.edu/airtrafficcontrol/.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successful completion of ENGL 1110 or Goal Area 1.
- **Math:** To enroll in these program courses, students must have successful completion of MATH 1110 or another Goal Area 4 course.

Air Traffic Control A.A.S. Degree

Credits: 60

All courses must be completed with a grade of "C" or better.

Course #	Course Name	Credits
ATCT 2000	Intro to Air Traffic Control (ATC)	3.00
ATCT 2100	Intro to Aviation Weather	3.00
ATCT 2135	Aviation Law: Accident Investigation Analysis and ATC Applications	3.00
ATCT 2110	Aviation Knowledge	3.00
ATCT 2310	Principles of En Route Non-Radar Separation	3.00
ATCT 2120	Basic Navigation/Flight Operations	3.00
ATCT 2425	Application of En Route Non-Radar and Intro to Radar Separation	6.00
ATCT 2415	ATC Computers and Flight Data	3.00
ATCT 2515	ATC Career Preparation	3.00
ATCT 2500	Advanced Radar and Radar Associate Application	9.00
ATCT 2445	Human Factors in ATC	3.00

General Education prerequisite credits (see below) . . . 18.00

General Education Courses (18 credits)

Students must successfully complete or transfer 18 credits of general education coursework. Coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from both Goal Areas 1 and 4 and three credits from Goal Areas 7, 8, 9 or 10.

Recommended courses meeting the stated goal area requirements:
Three credits from Goal Area 1—ENGL 1110 (3 credits)
Three credits from Goal Area 4—MATH 1110 (4 credits)
Three credits from Goal Area 7, 8, 9, or 10, with the following recommended:

SPCH 1012 Intercultural Communication—3 credits

PHIL 1110 Critical Thinking Skills—3 credits

COML 1100 Computer Literacy Basics with Keyboarding—2 credits (is also recommended, but does NOT meet general education requirements).

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Aircraft Technician*

* Due to program suspension, new students are no longer admitted to this program.

- Aviation Powerplant Technician A.A.S. Degree—67 credits
- Aviation Airframe Technician A.A.S. Degree—63 credits
- Aircraft General Certificate—19 credits
- Aircraft Powerplant Certificate—18 credits
- Aircraft Systems Certificate—18 credits
- Aircraft Structures Certificate—17 credits

What You Will Learn

MCTC's Aircraft Technician program will prepare you to perform extensive maintenance, repair work and detailed inspections on all types of aircraft while meeting Federal Aviation Administration standards.

You will learn to service, repair, and overhaul aircraft systems, structures and engines to ensure proper operation and safety. In addition, you will learn how to access information on specifications, diagnostics and troubleshooting techniques.

You will gain hands-on training at the Flying Cloud Airport in Eden Prairie, Minn. There, you will have the chance to work on hydraulics, pneumatics, navigation, electrical and instrument systems. Given the importance of teamwork in the aviation environment, you will be instructed on team-building and communication techniques. You will also learn valuable decision-making and deductive-reasoning skills.

For more information and a tour of the Flying Cloud campus, call George Hoxie at 952-826-2454.

Where You Could Work

- Corporate aviation divisions
- Charter airlines
- Aircraft manufacturers
- Airports
- Aircraft overhaul facilities
- Government and military facilities
- Aircraft equipment manufacturers
- Major and regional airlines

How You Apply

Please contact our technical program recruiter at 612-659-6214, or visit <http://www.minneapolis.edu/>.

Students are accepted into this program fall term.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ESOL 0041 or be declared ready to enroll in ENGL 0900 or ESOL 0051 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Placement testing may be waived by presentation of an official transcript showing equivalent coursework completed within the last five years with a grade of "C" or better.

Aviation Powerplant Technician A.A.S. Degree

Credits: 67

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
AMTG 1100	Introduction to Aviation Maintenance . . .	3.00
AMTG 1111	Materials and Processes	4.00
AMTG 1121	Weight and Balance	2.00
AMTG 1122	Aircraft Drawing	1.00
AMTG 1125	Basic D.C. Electricity	4.00
AMTR 2300	Fire Protection Systems	1.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
AMTA 2329	A.C. Electrical Equipment	3.00
AMTP 2151	Reciprocating Engines	6.00
AMTP 2159	Turbine Engines	6.00
AMTP 2190	Powerplant Inspection	3.00
AMTP 2266	Powerplant Systems	2.00
AMTP 2270	Ignition Systems	3.00
AMTP 2274	Fuel Metering	3.00
AMTP 2282	Propellers	2.00
AMTR 2207	Electrical Systems and Troubleshooting .	5.00
AMTR 2302	Fuel Systems	1.00
AMTR 2304	Instrument Systems	2.00
General Education Courses (see next page)		16.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

General Education Courses (16 credits)

To complete the Aviation Powerplant Technician A.A.S. degree, students are required to successfully complete 16 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are recommended are PHYS 1100, PSYC 1100 and PHIL 1110.

Aviation Airframe Technician A.A.S. Degree

Credits: 63

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
AMTA 2316	Hydraulics and Pneumatics	2.00
AMTG 1100	Introduction to Aviation Maintenance	3.00
AMTG 1111	Materials and Processes	4.00
AMTG 1121	Weight and Balance	2.00
AMTG 1122	Aircraft Drawing	1.00
AMTG 1125	Basic D.C. Electricity	4.00
AMTR 2300	Fire Protection Systems	1.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
AMTA 1200	Nonmetallic Structures	4.00
AMTA 1209	Sheet Metal Structures	5.00
AMTA 1214	Aircraft Welding	1.00
AMTA 1236	Airframe Inspection	2.00
AMTA 1244	Assembly and Rigging	2.00
AMTA 2321	Landing Gear Systems	2.00
AMTA 2324	Environmental Systems	3.00
AMTA 2329	A.C. Electrical Equipment	3.00
AMTR 2207	Electrical Systems and Troubleshooting	5.00
AMTR 2302	Fuel Systems	1.00
AMTR 2304	Instrument Systems	2.00
General Education Courses (see below)		16.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (16 credits)

To complete the Aviation Airframe Technician A.A.S. degree, students are required to successfully complete 16 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are recommended are PHYS 1100, PSYC 1100 and PHIL 1110.

Aircraft General Certificate

Credits: 19

Course #	Course Name	Credits
AMTA 2329	A.C. Electrical Equipment	3.00
AMTG 1100	Introduction to Aviation Maintenance	3.00
AMTG 1111	Materials and Processes	4.00
AMTG 1121	Weight and Balance	2.00
AMTG 1122	Aircraft Drawing	1.00
AMTG 1125	Basic D.C. Electricity	4.00
AMTR 2304	Instrument Systems	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Aircraft Powerplant Certificate

Credits: 18

Course #	Course Name	Credits
AMTA 2321	Landing Gear Systems	2.00
AMTP 2151	Reciprocating Engines	6.00
AMTP 2159	Turbine Engines	6.00
AMTP 2190	Powerplant Inspection	3.00
AMTR 2302	Fuel Systems	1.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Aircraft Systems Certificate

Credits: 18

Course #	Course Name	Credits
AMTA 2316	Hydraulics and Pneumatics	2.00
AMTP 2266	Powerplant Systems	2.00
AMTP 2270	Ignition Systems	3.00
AMTP 2274	Fuel Metering	3.00
AMTP 2282	Propellers	2.00
AMTR 2207	Electrical Systems and Troubleshooting	5.00
AMTR 2300	Fire Protection Systems	1.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Aircraft Structures Certificate

Credits: 17

Course #	Course Name	Credits
AMTA 1200	Nonmetallic Structures.	4.00
AMTA 1209	Sheet Metal Structures	5.00
AMTA 1214	Aircraft Welding.	1.00
AMTA 1236	Airframe Inspection	2.00
AMTA 1244	Assembly and Rigging	2.00
AMTA 2324	Environmental Systems	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

American Indian Studies

- Certificate—12 credits

What You Will Learn:

A certificate in American Indian Studies offers an academic award for students interested in a concentrated study of the historical and contemporary issues of Native American peoples and cultures. These courses can satisfy a number of lower-division courses for students interested in going on to a four-year major or minor program in American Indian Studies.

Where You Could Work:

- Nonprofit agencies
- Social service centers
- Advocacy groups
- Cultural resource organizations

American Indian Studies Certificate

Credits: 12

Required Course:

Course #	Course Name	Credits
AMIS 1000	Native America	3.00

Elective Courses:

Students should choose any 9 credits from the courses listed below:

Course #	Course Name	Credits
AMIS 1100	Native American Literature	3.00
AMIS 1200	Native American Art and Art History . . .	3.00
AMIS 1300	Native Americans in Cinema and Popular Culture	3.00

Apparel Technologies

- Apparel Technologies Diploma—32 credits
- Apparel Technologies Advanced Certificate—14 credits

What You Will Learn

MCTC's Apparel Technologies program prepares you to produce a finished, professional garment from pattern to final product.

Program coursework covers apparel design, using both traditional pattern-making and computer-aided design methods, development, and grading. Standard industry software is used to automate the design process. You will learn industrial sewing methods and study textiles, product development, the sewn-goods manufacturing process, alteration techniques, and proper garment fit and proportion.

The Apparel Technologies Advanced Certificate is designed for students desiring advanced skills. To be eligible to take these advanced courses, students must have completed the Apparel Technologies diploma or have industrial experience as determined by an Apparel Technologies faculty member.

MCTC's program—the only one in the state—provides extensive hands-on training by industry-experienced instructors. You will gain a sense of personal accomplishment with the completion of each garment.

You will need good eyesight and good hand-eye coordination to successfully participate in this program. You must purchase sewing and drafting tool kits, fabrics and notions for class projects, as well as pattern paper.

Where You Could Work

- Small to mid-sized apparel and sewn-product manufacturers
- Alteration, bridal and tailor shops
- Theaters and costume houses
- Technical specifications and pattern-making facilities or departments of corporations

Students are accepted into this program both fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in program courses, students must have successfully completed READ 0100 or be declared ready to enroll into READ 0200 or placed or have faculty recommendation into ESOL 0052.
- **Math:** To enroll in program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Apparel Technologies Diploma

Credits: 32

First Semester Courses

Course #	Course Name	Credits
APRL 1000	Industrial Sewing Methods	4.00
APRL 1100	Textiles.	3.00
GRPH 1130	Introduction to Graphic Software.	3.00
APRL 1360	Pattern Development 1	3.00
SPCH 1000	Fundamentals of Communication	3.00

Second Semester Courses

Course #	Course Name	Credits
APRL 2300	Pattern Development 2	3.00
APRL 2750	Product Development and Manufacturing.	3.00
GRPH 1570	Adobe Illustrator	3.00
APRL 2150	Computer Aided Design	4.00
APRL 1400	Garment Construction	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

Students must successfully complete three credits of general education coursework. SPCH 1000 is required and satisfies Goal Area 1.

Apparel Technologies Advanced Certificate

Credits: 14

To be admitted to the Apparel Technologies Advanced Certificate you must have completed the Apparel Technologies Diploma or have the approval of an Apparel Technologies faculty member.

Course #	Course Name	Credits
APRL 1660	Fitting Analysis and Applications.	3.00
APRL 1800	Draping and Pattern Construction	4.00
APRL 2400	Advanced Garment Construction.	3.00
APRL 2500	Clothing Line Design	4.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Architectural Technology

- Architectural Technology Diploma—64 credits

What You Will Learn

MCTC's Architectural Technology program will prepare you to work closely and effectively with architects to produce construction drawings for use by contractors.

You will learn traditional drafting techniques, then receive extensive training in computer-aided design (CAD) technology. Throughout the program, you will use CAD to produce a variety of drawings, two- and three-dimensional, for residential and commercial projects.

The coursework will cover architectural history as well as modern architectural standards. You will develop skills in model building, building code analysis, structural design, mechanical systems and legal contracts. You will also be trained to solve problems that arise during the assembly of building components.

The architectural technology classroom is designed to resemble a typical architectural firm's office. You will be assigned an individual drafting station and a computer with the latest version of AutoCAD. The learning environment and your coursework will help prepare you to work in collaboration with architects and engineers.

Instructors are all registered, practicing architects who are committed to enhancing your employability with Minnesota's architectural firms—60 percent of which are located within blocks of MCTC's campus.

For a tour of the classroom and individual student workstations, contact Dr. Tom Obermeyer at 612-659-6096.

Where You Could Work

- Architectural firms
- Engineering firms
- Facilities planning organizations
- Interior design firms
- Landscape firms
- Building-products manufacturers

Students are accepted into this program for fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052 on the basis of their reading assessment test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ESOL 0041

or be declared ready to enroll in ENGL 0900 or ESOL 0051 on the basis of their writing placement test scores.

- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Architectural Technology Diploma

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ARCH 1000	Architectural Technology Lab 1	6.00
ARCH 1010	Architectural Orientation	2.00
ARCH 1020	Building Technology 1	2.00
ARCH 1030	Introduction to CAD	2.00
General Education Courses (see below)		3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Course #	Course Name	Credits
ARCH 1200	Architectural Technology Lab 2	6.00
ARCH 1220	Building Technology 2	2.00
ARCH 1230	Intermediate CAD	2.00
ARCH 1500	Building Structures	3.00
ARCH 1510	Mechanical and Electrical Systems	3.00
ARCH 1520	Building Codes/Zoning/Specifications	2.00
ARCH 1530	Architect's Professional Practice	2.00
ARCH 1540	Architectural History	3.00
ARCH 2000	Architectural Technology Lab 3	6.00
ARCH 2020	Building Technology 3	2.00
ARCH 2030	Applied CAD	2.00
ARCH 2200	Architectural Technology Lab 4	6.00
ARCH 2220	Building Technology 4	2.00
ARCH 2230	Advanced CAD	2.00
General Education Courses (see below)		6.00

General Education Courses (9 credits)

To complete the Architectural Technology Diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Elective Courses

Course #	Course Name	Credits
ARCH 2500	Office Internship	7.00
ARCH 2550	Independent Study	3.00

Barbering

- Barbering Diploma—56 credits

What You Will Learn

MCTC's Barbering program helps you develop the knowledge and skills needed to provide hair, beard and skin-care services for a diverse clientele.

You will be instructed in all skills related to barbering: contemporary haircutting and styling, shaving, facials, massage, chemical services, scalp treatments and hairpieces. To ensure your health and well-being and that of your customers, you will learn proper sanitation and hygiene practices, safety measures and first-aid techniques. You also will study anatomy, shop management, and business and professional ethics.

Under the direction of an instructor with more than 25 years of experience, you will serve clients in the College barbering clinic. The clinic provides an opportunity to fine-tune your skills and serve diverse customers who have a variety of skin and hair types.

To qualify to enter the Barbering program, you must have completed the 10th grade, and you must meet a reading requirement. To carry out tasks essential to the practice of barbering, you need to have good hand-eye coordination and be in sufficiently good physical condition to tolerate long periods of time spent standing. You will be required to purchase a smock, a barbering kit with clippers, shears, combs, hairdryer and supplies, as well as textbooks.

Upon completion of the Barbering program, you will be prepared to take the Minnesota State Barber Board Apprenticeship Exam, which you must pass to practice as a barber.

Where You Could Work

- Barber shops in Minnesota and in states with reciprocity

Students are accepted into this program both at the beginning and middle of fall and spring semesters. Admission to this program is on a space-available basis only.

Courses in this program require achievement of the following academic skill levels:

- **Reading:** To enroll in program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052 on the basis of their reading placement test scores.

Barbering Diploma

Credits: 56

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
BARB 1000	Introduction to Barbering and Histology	4.00
BARB 1050	Basic Lab 1	3.00
BARB 1100	Basic Lab 2	3.00
BARB 1150	Basic Fundamentals of Barbering Services	4.00
BARB 1200	Survey Lab 1	3.00
HLTH 1101	Personal and Community Health	3.00
HLTH 1150	First Aid and CPR	2.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BARB 1250	Survey Lab 2	3.00
BARB 1300	Anatomy and Physiology in Barbering	2.00
BARB 1350	Chemical Services	2.00
BARB 1360	Intermediate Lab 1	3.00
BARB 1370	Intermediate Lab 2	3.00
BARB 1400	Business Management in Barbering	2.00
BARB 1450	Advanced Technology	2.00
BARB 1460	Advanced Lab 1	4.00
BARB 1470	Advanced Lab 2	4.00
BARB 1500	Open Lab 1	4.00
BARB 1510	Open Lab 2	4.00
BARB 1520	Job Seeking	1.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (5 credits)

To complete the Barbering Diploma, students are required to successfully complete the general education coursework listed in the course sequence above (HLTH 1101 and HLTH 1150).

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Biology

- Biology A.S. Degree—64 credits

What You Will Learn

The Biology A.S. degree is specifically designed to prepare you for transfer into the junior or third year of a biology major at a four-year college or university.

Students are accepted into this major both fall and spring semesters.

Courses in this major require achievement of the following program admission requirements:

- **Reading:** Students must successfully complete READ 0200 or ESOL 0052, OR be declared ready to enroll in READ 1300 on the basis of their reading assessment scores.
- **Writing:** Students must have successfully completed ENGL 0900 or ESOL 0051, OR be declared ready to enroll in ENGL 1110 on the basis of their writing assessment test scores.
- **Math:**
 For **Option 1:** Students must have successfully completed MATH 1110 or been placed into MATH 1120 or above on the basis of their mathematics assessment scores.
 For **Option 2:** Students must have successfully completed MATH 1110 and MATH 1120 or MATH 1125 or been placed into MATH 1180 on the basis of their mathematics assessment scores.

MCTC has an articulation agreement with St. Cloud State University, which provides for transfer of the A.S. in Biology to all of the B.S. degrees in the Department of Biology. MCTC is working on additional transfer agreements.

Biology A.S. Degree

Credits 64

Required Courses

Course #	Course Name	Credits
BIOL 1100	Introduction to Biology	4.00
BIOL 2200	Principles of Biology.	4.00
CHEM 1151	Principles of Chemistry 1.	5.00
CHEM 1152	Principles of Chemistry 2.	5.00
CHEM 2204	Organic Chemistry 1	4.00
CHEM 2224	Organic Chemistry 1 Lab.	2.00
CHEM 2205	Organic Chemistry 2	4.00
CHEM 2225	Organic Chemistry 2 Lab.	2.00
ENGL 1110	College English 1	3.00

AND

Option 1

Course #	Course Name	Credits
MATH 1150	Statistical Analysis.	4.00
PHYS 1131	College Physics 1.	5.00
PHYS 1132	College Physics 2.	5.00

AND

Choose **two** of the following course options:

BIOL 2230	Microbiology	2.00
-----------	------------------------	------

AND

BIOL 2231	Microbiology Lab	2.00
-----------	----------------------------	------

OR

BIOL 2250	Plant Biology	4.00
-----------	-------------------------	------

OR

BIOL 2260	Animal Biology.	4.00
-----------	-------------------------	------

OR

BIOL 2205	Genetics.	4.00
-----------	-------------------	------

OR

Option 2

Course #	Course Name	Credits
MATH 1180	Calculus 1.	5.00
PHYS 1211	Physics for Science and Engineering 1 . .	6.00
MATH 1190	Calculus 2.	5.00
PHYS 1221	Physics for Science and Engineering 2 . .	6.00

AND

General Education Electives (9 credits)

The total for the required courses plus either Option 1 or Option 2 is 55 credits. Add nine credits of general education electives (see following paragraphs) for a total of 64 credits to complete the Associate in Science in Biology degree.

To complete the A.S. degree in Biology, students are required to successfully complete coursework from six of the 10 goal areas of the MnTC. A minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10.

Students who choose **Option 1** must select courses from a least two different MnTC goal areas than are represented among the required credits in order to meet the requirement for coursework completed in six of the 10 MnTC goal areas.

Students who choose **Option 2** must select courses from at least three different MnTC goal areas than are represented among the required credits in order to meet the requirement for coursework completed in six of the 10 MnTC goal areas. It is recommended that students choose BIOL 1136, Environmental Science (MnTC 3 and 10) as one of their electives.

Students intending to transfer to St. Cloud State University are advised to:

Select Option 1

Take BIOL 2205: Genetics

Not take BIOL 2230 and BIOL 2231: Microbiology + Lab

Biotechnology

- Biotechnology A.S. degree—64 credits

What You Will Learn

MCTC's Biotechnology A.S. degree program will prepare you for entry-level positions in the emerging and exciting biotechnology industry and is transferable to four-year baccalaureate majors within the biology and chemistry or related disciplines. Many courses in the program also transfer and apply to pre-med, pre-engineering, pre-vet and other academic tracks.

This program provides you with a strong scientific background and extensive laboratory experience in methods currently used in research, government, and industry laboratories. You will learn various skills that are important to gain employment at entry level in the growing bioscience industry, including laboratory techniques and instrumentation; basic computer skills associated with generating, analyzing and presenting experimental data; documenting laboratory procedures according to industry standards; and understanding the regulatory affairs that govern the bioscience industry. You will learn how to effectively work in cooperative teams in a laboratory setting to plan and complete experiments in a timely manner, and your will also complete oral and written presentations. You will learn to prepare job search materials and practice interview skills.

MCTC has developed partnerships within the industry and community, and you will benefit in numerous ways from these alliances, including possible industry internships, seminars by guest speakers from the industry, and industry and research laboratory tours.

The Biotechnology program provides the academic coursework required to transfer to baccalaureate programs. MCTC has agreements with St. Cloud State University that facilitate transfer of the A.S. in Biotechnology degree coursework to all of the B.S. degrees in the Department of Biology, including the B.S. in Biotechnology. MCTC is working on additional transfer agreements.

Where You Could Work

- Bioscience industry, academic and government settings—in laboratory and instrumentation, quality control, quality assurance, production, manufacturing, documentation and several other divisions.
- You can also pursue a four-year degree in biology, chemistry or in related fields.

Register for BIOT 1000: Introduction to Bioscience to find out more about this program and the exciting field of bioscience.

Biotechnology A.S. Degree

Credits: 64

Required Core Courses

Course #	Course Name	Credits
BIOT 1000	Introduction to Bioscience.	1.00
BIOT 2320	Regulatory Affairs and QC Lab Skills.	4.00
BIOL 2200	Principles of Biology.	4.00
BIOL 2230	Microbiology	2.00
BIOL 2231	Microbiology Lab	2.00
BIOL 2500	Molecular Biology	4.00
CHEM 1151	Principles of Chemistry 1.	5.00
CHEM 1152	Principles of Chemistry 2.	5.00
CHEM 2204	Organic Chemistry 1	4.00
CHEM 2410	Analytical Chemistry and Instrumentation Theory	3.00
CHEM 2420	Analytical Chemistry and Instrumentation Lab.	2.00
CHEM 2610	Biochemistry — Theory & Principles.	3.00
CHEM 2620	Biochemistry Lab	2.00

Required Supporting Courses

Course #	Course Name	Credits
MATH	College Math*	4.00
ENGL 1110	College English	3.00
PHIL 1171	Ethics	3.00
OR		
PHIL 1181	Ethics in the Community	3.00
General Education Electives*		13.00

*Choose from electives designed for transfer to four-year institutions or job opportunities in local industry, including industry internships, undergraduate research, forensic science and tissue culture courses. Students must work closely with a counselor when selecting math (students must choose among four specified math courses) and general education electives. A minimum of three credits must be completed from MnTC Goal Area 1 and three credits from MnTC Goal Areas 7, 8, 9 or 10, **AND** coursework must be selected from at least six of the MnTC goal areas to complete the A.S. in Biotechnology.

Please visit www.minneapolis.edu/biotechnology for complete details related to the recommended sequence for required courses and to view recommended elective general education courses.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Completion of READ 0200 or ESOL 0052 or placement into READ 1300.
- **Writing:** Completion of ENGL 0900 or ESOL 0051 or placement into ENGL 1110.
- **Math:** Completion of MATH 0080 or placement into MATH 1110 or above.
- **Chemistry:** One full year of high school chemistry or CHEM 1020.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Business Management

- Business Management A.S. Degree—60 credits
Banking and Finance Concentration
- Banking and Finance Certificate—21 credits

What You Will Learn

MCTC's Business Management program will provide you with a broad background in the functional areas of business, such as accounting, management, marketing, leadership and small business development. You can either continue your studies or find entry-level employment in the field.

The accounting courses offered through the program will teach you to read and understand financial statements and prepare accounting statements for small to medium-sized organizations. In additional courses, you will learn oral and written business communication skills, the basic legal aspects of business, dispute resolution, marketing strategies, and how to evaluate an organization's strengths and weaknesses.

The program will prepare you to serve as a manager of business, government and/or nonprofit organizations using the four basic management functions: planning, organizing, leading and controlling. You will put all of your knowledge to work in a final case analysis that will be evaluated by program faculty.

MCTC has an articulation agreement with Metropolitan State University and most MnSCU institutions. Metropolitan State offers its complete bachelor of science degree in business administration on the MCTC campus.

Where You Could Work

- Private businesses
- Not-for-profit/nonprofit organizations
- Government
- Self-employment

Students are accepted into this program for fall, spring and summer terms.

Business Management A.S. Degree

Credits: 60

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
BUSN 1140	Introduction to Business	3.00
BUSN 1142	Principles of Marketing	4.00
BUSN 1154	Business Communications	3.00
BUSN 2202	Financial Accounting	4.00
BUSN 2260	Legal Environment of Business	4.00
BUSN 2252	Principles of Management	4.00
INFS 1000	Information Literacy and Research Skills	2.00

Elective Courses

Choose 6 credits from among the following courses:

Course #	Course Name	Credits
BUSN 1143	Principles of Advertising	3.00
BUSN 1145	Small Business Management	3.00
BUSN 1155	Human Relations and Team Building	3.00
BUSN 1166	Women in Leadership and Management	3.00
BUSN 1180	Principles of Banking and Finance	3.00
BUSN 1182	Principles of Consumer Lending	3.00
BUSN 1200	Computer Applications in Home and Business	3.00
BUSN 2224	Managerial Accounting	4.00
BUSN 2254	Entrepreneurship	3.00
BUSN 2256	Supervision and Leadership	3.00
BUSN 2270	Introduction to International Business	3.00

General Education Courses (30 credits)

To complete the Business Management A.S. degree, students are required to successfully complete 30 credits of general education coursework. This coursework must be selected from at least six of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are required and/or recommended are ENGL 1110 and ENGL 1111 (required), SPCH 1010, MATH 1110, MATH 1140 (recommended).

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Banking and Finance Concentration A.S. Degree

Recommended coursework.

Business Management Required Core Courses (21 credits)

Course #	Course Name	Credits
BUSN 1140	Introduction to Business	3.00
BUSN 1142	Principles of Marketing	4.00
BUSN 2202	Financial Accounting	4.00
BUSN 2252	Principles of Management	4.00
BUSN 2260	Legal Environment of Business	4.00
INFS 1000	Information Literacy and Research Skills	2.00

Business Management Required Banking and Finance Courses (12 credits)

Course #	Course Name	Credits
BUSN 1180	Principles of Banking and Finance	3.00
BUSN 1190	Selling Financial Institution Products	3.00
BUSN 1182	Principles of Consumer Lending	3.00
BUSN 1183	Principles of Commercial Lending	3.00

General Education Courses (in these categories) (30 credits)

Course #	Course Name	Credits
Goal Area 1: Written and Oral Communication		
ENGL 1110	College English 1	3.00
ENGL 1111	College English 2	3.00
SPCH 1012	Intercultural Communication	3.00

Goal Area 3: Natural Sciences—any 3 credits

Goal Area 4: Mathematics/Logical Reasoning (recommended)		
MATH 1110	College Algebra.	4.00
MATH 1140	Introductory Statistics	3.00

Goal Area 5: History and Behavioral Sciences (recommended)		
ECON 2000	Macroeconomics.	3.00
ECON 2200	Microeconomics.	3.00

MnTC Goal Areas 7–10. any 3 credits

Electives from MnTC Goal Areas 1–10 any 2 credits

Note: Prerequisites for all Banking and Finance courses:
READ 0100 or ESOL 0052 **AND** ENGL 0900 or ESOL 0051.

Banking and Finance Certificate

Credits: 21

This certificate award is a result of a unique partnership between MCTC, US Bank, Goodwill Easter Seals and Project for Pride in Living. A team of individuals from these agencies provided their expertise in the creation of training and educational programs in banking and finance.

This program is designed to provide individuals who work in, or are interested in working in, a financial setting a comprehensive understanding of the professional skills needed for advanced positions in the banking industry. Interested students may progress from earning a certificate or an associate degree to a bachelor's degree and then to an MBA from Metropolitan State University.

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Note: Prerequisites for all Banking and Finance courses:
READ 0100 or ESOL 0052 **AND** ENGL 0900 or ESOL 0051.
To complete the Business Management-Banking and Finance Certificate, students are required to successfully complete SPCH 1010 or SPCH 1012.

Course #	Course Name	Credits
BUSN 1140	Introduction to Business	3.00
BUSN 1154	Business Communications.	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BUSN 1180	Principles of Banking and Finance	3.00
BUSN 1190	Selling Financial Institution Products.	3.00
BUSN 1182	Principles of Consumer Lending	3.00
BUSN 1183	Principles of Commercial Lending	3.00

General Education Courses (3 credits)

To complete the Business Management-Banking and Finance Certificate, students are required to successfully complete SPCH 1010 or SPCH 1012.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Business Office Administration

- Administrative Assistant/Software Support Specialist A.A.S. Degree—60 credits
- Office Information Processing Specialist A.A.S. Degree—60 credits
- Administrative Assistant/Software Support Diploma—31 credits
- Legal Office Specialist Certificate—27 credits
- Customer Service/Contact Center Specialist Certificate—18 credits

What You Will Learn

MCTC's Business Office Administration programs help students become proficient in the computer, business, and communication skills that are used to provide administrative and technology support in a wide variety of business office and customer service settings.

Coursework will cover the fundamentals of business computers, business culture, written business communication, business presentations and extensive work with current software applications. You will also learn human relations, problem-solving and team-building skills that are important in the workplace.

During the program, you will receive hands-on training in keyboarding skills and with current versions of the Microsoft Office applications: Word, Excel, PowerPoint and Access. In the A.A.S. degree program, you will learn the Windows operating system and the basics of microcomputer system maintenance, applications and support. Completion of an internship is also a popular experience for students. Additional emphasis is placed on résumé preparation and career portfolio construction, as well as job search techniques that will cap your degree experience.

MCTC has an articulation agreement with Metropolitan State University for students who wish to transfer A.A.S. credits into the B.A.S. degree in Organization Administration and Technology at Metropolitan State University.

Where You Could Work

- Businesses of all types and sizes
- Nonprofit organizations
- Government agencies
- With an A.A.S. degree:
 - Computer support service companies
 - Computer training facilities and educational institutions
 - All business organizations

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** With the exception of Legal Office Specialist, to enroll in BTEC programs, you must have successfully completed READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052, or have placement into READ 0200 or ESOL 0052.

Administrative Assistant/Software Support Specialist A.A.S. Degree

Credits: 60

Recommended course sequence below:

First Semester

Course #	Course Name	Credits
BTEC 1020	Introduction to Computer Applications	3.00
BTEC 1060	Keyboarding	3.00
BTEC 1080	Microsoft Word	3.00
BTEC 1835	Business English	3.00
SPCH 1010	Interpersonal Communication	3.00

Second Semester

Course #	Course Name	Credits
BTEC 2775	Power Keyboarding	3.00
BTEC 2100	Microsoft Excel	3.00
BTEC 2375	Written Business Communications	3.00
BTEC 2030	Business Presentations	2.00
One course from MnTC Goal Area 7, 8, 9 or 10		3.00

Third Semester

BTEC 2110	Microsoft Access	3.00
BTEC 2825	Career Management	2.00
BUSN 1155	Human Relations and Team Building	3.00
MnTC electives		6.00

Fourth Semester

BTEC 2730	The Professional Office	3.00
BTEC 2450	Internship	2.00-4.00
MnTC electives		4.00
Award electives (BTEC, ACCT, BUSN, ITEC or GRPH)		6.00-9.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program. The internship may be taken as a 2, 3, or 4 credit experience.

General Education Courses (16 credits)

Administrative Assistant/Software Support Specialist A.A.S. degree students are required to complete a minimum of 16 credits of general education coursework. Within this total, SPCH 1010 is required and satisfies the three-credit Goal Area 1 requirement. Of the remaining 13 general education credits, at least three credits are required from Goal Areas 7, 8, 9 or 10.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Elective Courses

Any course in BTEC, ITEC or BUSN.
Recommended courses:

Course #	Course Name	Credits
BUSN 2252	Principles of Management	3.00
BUSN 2256	Supervision and Leadership Skills	3.00
ITEC 1425	Data Communications	4.00
ITEC 1475	Linux System Administration	4.00
ITEC 1310	Microcomputer System Maintenance	4.00

Office Information Processing Specialist A.A.S. Degree

Credits: 60

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
BTEC 1010	Fundamentals of Business Computers	2.00
BTEC 1060	Keyboarding	3.00
BTEC 1080	Microsoft Word	3.00
BTEC 1800	Business Culture and Communication	3.00
BTEC 2030	Business Presentations	2.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BTEC 2100	Microsoft Excel	3.00
BTEC 2110	Microsoft Access	3.00
BTEC 2355	Desktop Publishing with Microsoft Word	3.00
BTEC 2375	Written Business Communications	3.00
BTEC 2450	Internship	1.00
BTEC 2630	Microsoft Power Point	2.00
BTEC 2730	The Professional Office	3.00
BTEC 2775	Power Keyboarding	2.00
BTEC 2825	Career Management	2.00
General Education Courses (see below)		16.00
Elective Courses (see below)		9.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (16 credits)

To complete the Office Information Processing Specialist A.A.S. degree, students are required to successfully complete 16 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Elective Courses

Any 2000 level BTEC course or any ACCT, BUSN, ITEC or GRPH course.

Administrative Assistant/Software Support Diploma

Credits: 31

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
BTEC 1020	Introduction to Computer Applications	3.00
BTEC 1060	Keyboarding	3.00
BTEC 1080	Microsoft Word	3.00
BTEC 1835	Business English	3.00
SPCH 1010	Interpersonal Communications	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BTEC 2030	Business Presentations	2.00
BTEC 2100	Microsoft Excel	3.00
BTEC 2375	Written Business Communications	3.00
BTEC 2730	The Professional Office	3.00
BTEC 2775	Power Keyboarding	3.00
BTEC 2825	Career Management	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Administrative Assistant/Software Support Specialist Diploma, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Note: SPCH 1010 satisfies Goal Area 1.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Legal Office Specialist Certificate

Credits: 27

What You Will Learn

This program will provide you with the skills and proficiencies required to work in modern law offices, legal departments of corporations, government offices, legal aid offices and courts. The coursework will develop your skills for processing legal documents, understanding legal terminology and documentation, working with legal software applications, executing law office procedures, keeping records, billing, becoming aware of applicable policies and regulations for the Minnesota legal system, and comprehending professional standards and ethics.

Introductory Courses

(Listed below are the required courses we suggest students chose from during their first semester).

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
BTEC 1020	Introduction to Computer Applications . . .	3.00
BTEC 1060	Keyboarding	3.00
BTEC 1160	Legal Office Procedures	3.00
BTEC 1835	Business English	3.00

Advanced Courses

(Listed below are additional courses required for their completion of this program).

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
BTEC 1165	Legal Transcription.	3.00
BTEC 2375	Written Business Communication.	3.00
BTEC 2775	Power Keyboarding	3.00
SPCH 1010	Interpersonal Communication	3.00
BTEC 1080	Microsoft Word	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning the first semester in the program.

General Education Courses (3 credits)

To complete the Legal Office Specialist Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Note: SPCH 1010 satisfies Goal Area 1.

Central Services Technician

- Central Services Technician Certificate—10 credits

What You Will Learn

This certificate prepares students for entry-level work in a healthcare setting sterilizing instruments and working with medical and surgical equipment and supplies. The program course builds upon knowledge learned in the Healthcare Core Curriculum. Foundational anatomy and physiology and basic principles of microbiology will be presented. Course competencies include decontamination, preparation and packaging for sterilization, sterilization process, and sterile storage. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented. The lab will include campus and hospital-based practice settings. Through this practicum experience, you will become familiar with the central services of a hospital. The focus of this course is to provide you with comprehensive skills to perform competently and safely. You will have hands-on practice sessions to develop the skills and techniques required in performing various activities in the central services areas. Because this program requires internship in a hospital setting, you must pass a background check and provide proof of immunity status prior to placement in the healthcare setting.

Upon completion of CSIP 1000 and 1002, you are eligible to take the certification exam from the Certification Board for Sterile Processing and Distribution, Inc. (CBSPD).

The CSIP Program requires:

- Grades of "C" (2.0) or above in the CSIP theory course and in HCCC 1100;
- Pass (P) grades in the CSIP clinical internship course; and
- **Passing of a criminal background check prior to internship placement.** The College cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Where You Could Work

- Hospitals
- Surgery centers
- Medical equipment supply companies

Students are accepted into this program once per year.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in program courses, students must have successfully completed READ 0100 or placed into READ 0200 or ESOL 0052.

Central Services Technician Certificate (Sterile Instrument Processing)

Course #	Course Name	Credits
HCCC 1010	Behaviors for Success in Health Careers .	0.50
HCCC 1020	Communication in Healthcare	1.00
HCCC 1030	Awareness and Sensitivity to Client Needs.	0.50
HCCC 1040	Respecting Client and Staff Diversity . .	0.50
HCCC 1050	Healthcare Safety and Standard Precautions	0.50
HCCC 1060	Legal Issues in Health Care	0.50
HCCC 1070	Healthcare Ethics	0.50
HCCC 1100	Medical Terminology	1.00
CSIP 1000	Role of the Central Service Technician .	3.00
CSIP 1002	Central Services Technician Internship. .	2.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Chemistry

- Chemistry A.S. Degree—60 credits

MCTC's Chemistry major is specifically designed to prepare students for transfer into the junior or third year of a chemistry major at four-year colleges or universities. You will complete the coursework required in the first-two years of a four-year major in chemistry in several tracks offered by four-year institutions. Several of the courses and electives in the program are also required for biology, pharmacy, medical, veterinary, engineering and other related programs at four-year institutions.

What You Will Learn

You will learn and apply central theories in general, organic, analytical, and forensic chemistry or biochemistry. The program includes physics, mathematics and electives required for transfer. You will learn the applications of chemistry to various disciplines including health sciences, biological sciences and engineering. You will gain extensive laboratory experience utilizing various techniques and instruments. You will learn computer skills associated with data analysis and presentation, good laboratory practices and how to document laboratory procedures. You will learn to effectively work in cooperative teams in a laboratory setting to plan and complete experiments in a timely manner, and to give oral and written presentations.

MCTC has a transfer agreement with St. Cloud State University that facilitates transfer of the A.S. in Chemistry degree into the chemistry major in various tracks. MCTC is also working on transfer agreements with other four-year institutions.

Courses in this major require the following program admission requirements:

- **Reading:** completion of READ 0200 or ESOL 0052 or placement into READ 1300.
- **Writing:** completion of ENGL 0900 or ESOL 0052 or placement into ENGL 1110.
- **Math:** completion of MATH 80 or placement into MATH 1110 or higher.
- **Chemistry:** completion of one full year of high school Chemistry or CHEM 1020.

In addition to the courses required for this major, the Chemistry Department offers additional coursework students may want to consider taking, including:

CHEM 1145	Forensic Science 1	4.00
CHEM 2610	Biochemistry — Theory & Principles . . .	3.00
CHEM 2620	Biochemistry Lab.	2.00

Chemistry A.S. Degree

Credits: 60

Required Courses (Not all courses are offered each semester.)

Course #	Course Name	Credits
CHEM 1151	Principles of Chemistry 1.	5.00
CHEM 1152	Principles of Chemistry 2.	5.00
BIOT 2320	Regulatory Affairs and QC Lab Skills. . .	4.00
CHEM 2204	Organic Chemistry 1	4.00
CHEM 2224	Organic Chemistry 1 Lab.	2.00
CHEM 2205	Organic Chemistry 2	4.00
CHEM 2225	Organic Chemistry 2 Lab.	2.00
CHEM 2410	Analytical Chemistry & Instrumentation Theory	3.00
CHEM 2420	Analytical Chemistry & Instrumentation Lab.	2.00

AND

Math and Physics: Option 1

(Students transferring to the University of Minnesota must choose this option.)

Course #	Course Name	Credits
MATH 1180	Calculus 1	5.00
MATH 1190	Calculus 2	5.00
PHYS 1211	Physics for Science and Engineering 1 . .	6.00
PHYS 1221	Physics for Science and Engineering 2 . .	6.00

OR

Math and Physics: Option 2

Course #	Course Name	Credits
MATH 1170	Calculus for Business and Social Sciences .	4.00
PHYS 1131	College Physics 1	5.00
PHYS 1132	College Physics 2	5.00

General Education Electives:

Students seeking the A.S. degree in Chemistry must complete coursework in six of the 10 MnTC goal areas. Within the general education coursework, students must complete a minimum of three credits in MnTC Goal Area 1, and a minimum of three credits from MnTC Goal Areas 7, 8, 9 or 10.

Total of 53 credits of required coursework in

Option 1: The required courses fall within MnTC Goal Areas 3 (BIOT, CHEM, PHYS), 4 (MATH and PHYS), and 9 (if you take CHEM 1145 as an elective). The remaining **seven elective general education credits** must be selected to fulfill the requirement to complete coursework in three other goal areas.

Total of 45 credits of required coursework in

Option 2: The required courses fall within MnTC Goal Areas 3 (BIOT, CHEM, PHYS), 4 (MATH and PHYS), and 9 (if you take CHEM 1145 as an elective). The remaining **15 elective general education credits** must be selected to fulfill the requirement to complete coursework in at least two other goal areas.

Child Development

- Child Development A.S. Degree—60 credits
- Child Development A.A.S. Degree—60 credits
- Child Development Diploma—30 credits
- Child Development Certificate—16 credits

What You Will Learn

MCTC's Child Development program will prepare you to organize and lead activities and provide nurturing care for children, particularly in urban childcare centers, nursery schools, elementary classrooms and afterschool programs.

The program incorporates cultural diversity into all of its courses, emphasizing working with children and families of all kinds in an urban setting. Your coursework will cover child development, community, family and parent relationships, oral and written communication, safety, health and nutrition, and child guidance.

You also will study various teaching and learning methods and be trained to observe, document, and assess children, and to convey a sense of professionalism and ethical behavior in a classroom setting.

By the time you complete the program, you will know how to promote and communicate knowledge of child development; create healthy, respectful and challenging learning environments; create and maintain respectful and supportive relationships with families; and design and implement developmentally and culturally appropriate activities and curriculum.

You will put your new knowledge to work and gain experience through two practicums. MCTC partners with many agencies and organizations that provide wonderful learning opportunities for program participants.

Employment in the field will require you to pass a background check, as employers will not hire anyone who has a felony record. You also will need CPR and first aid training.

MCTC has an articulation agreement with Metropolitan State University, University of Wisconsin–Stout and Southwest State; and the MnSCU consortium.

Where You Could Work

- Childcare centers
- Family support agencies
- Head Start
- Public schools
- Afterschool programs
- Nursery schools or preschools
- Childcare resource or referral agencies
- Social service agencies
- Family resource programs
- Child life programs in hospitals

Students are accepted into this program for fall, spring and summer terms.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ESOL 0051 or ENGL 0900 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Child Development A.S. Degree

Credits: 60

Core Courses

(Listed below are required courses students should take during their first semester in this program.)

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1215	Growth and Development of Children and Youth	3.00
CHDV 1220	Child Safety, Health and Nutrition	3.00
EDUC 1235	Guiding Behaviors of Children and Youth	3.00
CHDV 1240	Caregiving and Teaching Strategies	3.00
EDUC 1500	Introduction to Urban Education and Urban Learners	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
CHDV 1545	Learning Experiences	3.00
CHDV 1600	Practicum 1	2.00
SPCH 1012	Intercultural Communications	3.00
SOCI 1110	Families in a Contemporary Society	3.00
ENGL 1100	College English 1	3.00
SOCI 2115	Family Violence	3.00
EDUC 2250	Introduction to Special Education	3.00
CHDV 2500	Professional Leadership	3.00
BIOL 1136	Environmental Science	3.00
BIOL 1137	Environmental Science Lab	1.00
ENGL 1111	College English 2	3.00
PSYC 2215	Child and Adolescent Psychology	3.00
Child Development Elective		3.00
General Education		8.00
MnTC, 1 course from Goal Area 6		

First Semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (30 credits)

To complete the Child Development A.S. degree, students must successfully complete 30 credits of general education coursework; 22 credits of general education coursework is listed in the award outline above. Additionally, eight credits, including one course from Goal Area 6, is required.

Child Development A.A.S. Degree

Credits: 60

Core Courses

(Listed below are required courses students should take during their first semester in this program.)

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1215	Growth and Development of Children and Youth	3.00
CHDV 1220	Child Safety, Health and Nutrition	3.00
EDUC 1235	Guiding Behaviors of Children and Youth	3.00
CHDV 1240	Caregiving and Teaching Strategies	3.00
EDUC 1500	Introduction to Urban Education and Urban Learners	3.00

Advanced Courses

(Listed below are additional courses required for your completion of this program.)

Course #	Course Name	Credits
CHDV 1545	Learning Experiences	3.00
CHDV 1600	Practicum 1	2.00
CHDV 1505	Professional Relationships for Early Childhood	3.00
ENGL 1100	College English 1	3.00
SOCI 1110	Families in a Contemporary Society	3.00
OR		
SOCI 2115	Family Violence	3.00
CHDV 2500	Professional Leadership	3.00
CHDV 2545	Curriculum Planning	3.00
CHDV 2600	Practicum 2	3.00
EDUC 2250	Introduction to Special Education	3.00
Child Development Elective		6.00
Gen. Ed. MnTC		12.00

First Semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Child Development Diploma

Credits: 30

Core Courses

(Listed below are required courses students should take during their first semester in this program.)

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1215	Growth and Development of Children and Youth	3.00
CHDV 1220	Child Safety, Health and Nutrition	3.00
EDUC 1235	Guiding Behaviors of Children and Youth	3.00
CHDV 1240	Caregiving and Teaching Strategies	3.00
EDUC 1500	Introduction to Urban Education and Urban Learners	3.00

Advanced Courses

(Listed below are additional courses required for your completion of this program.)

Course #	Course Name	Credits
CHDV 1505	Professional Relationships for Early Childhood	3.00
CHDV 1545	Learning Experiences	3.00
CHDV 1600	Practicum 1	2.00
ENGL 1110	College English 1	3.00
	Child Development Elective	3.00

General Education Courses (3 credits)

To complete the Child Development Diploma, students must successfully complete three credits of general education coursework.

Note: ENGL 1110 satisfies Goal Area 1.

First Semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Child Development Certificate

Credits: 16

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1215	Growth and Development of Children and Youth	3.00
EDUC 1235	Guiding the Behavior of Children and Youth	3.00
EDUC 1500	Introduction to Urban Education and Urban Learners	3.00
CHDV 1220	Child Safety, Health and Nutrition	3.00
CHDV 1240	Caregiving and Teaching Strategies	3.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Cinema: Cinema Production

- Cinema Production Certificate—30 credits

What You Will Learn

MCTC's Cinema Production Certificate integrates the language and aesthetics of cinema with film and digital video technology to support you in becoming a filmmaker. The intensive one-year core curriculum, required of all Cinema Division production students, is a hands-on introduction to the moviemaking process. Students develop professional skills in writing, camera operation, sound recording, and editing by working on numerous individual and group productions. After obtaining a Cinema Production certificate, students become eligible to pursue one of four specializations—Cinematography, Directing and Producing, Editing and Post-production, or Screenwriting, —and earn an A.S. at the end of the second year. MCTC's Cinema Division fuses cutting-edge technology and affordable professional training with an outstanding liberal arts education to help you become—above all—a compelling visual storyteller.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- Students seeking to reenroll in coursework they have successfully completed must have the permission of the instructor.
- Cinema Production courses are **not** available for auditing.

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria.

Please see Admissions for details and a projected open seat date for the initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test score.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test score.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test score. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

Cinema Production Certificate

Credits: 30

Listed below are the courses required for the Cinema Production Certificate:

First Semester Cinema Production Curriculum

Course #	Course Name	Credits
CIPR 1101	Cinema Production I	3.00
CIST 1101	Cinema History I	3.00
SCRN 1101	Introduction to Cinematic Storytelling .	3.00
ENGL 1110	College English 1	3.00
Recommended General Education Courses (see below) .		3.00

Second Semester Cinema Production Curriculum

Course #	Course Name	Credits
CIPR 1102	Cinema Production II	3.00
CIST 1102	Cinema History II	3.00
SCRN 1102	Writing the Short Fiction Screenplay . . .	3.00
CIPR 1103	Sound for Image	3.00
ENGL 1111	College English II	3.00

General Education Courses (9 credits)

To earn the Cinema Production Certificate, students are required to successfully complete nine credits of general education including MnTC Goal Area 1.

Note: ENGL 1110 and ENGL 1111 satisfy six credits of MnTC for Goal Area 1.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the three remaining General Education course credits:

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
JOUR 1000	Introduction to Mass Communication (MnTC 9)	3.00
ARTS 1110	Introduction to Arts (MnTC 6,8)	3.00
SPCH 1011	Group Process and Discussions (MnTC 1)	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7)	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5,8)	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10)	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8)	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7)	3.00
THTR 1104	Introduction to Acting (MnTC 6)	3.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Cinema: Cinema Studies

- Cinema Studies Certificate—24 credits

What You Will Learn

The Cinema Studies Program at MCTC covers narrative, documentary, and experimental cinema. The courses explore cinema from all over the world and across time periods. Through these genres, students will explore three areas of film study: film art and analysis of film images; film history and its social contexts; and an overview of the major theoretical and critical approaches to the study of film, including concepts of genre, auteur, psychoanalysis and technology.

MCTC has an articulation agreement with Augsburg College.

Cinema Studies courses are **not** available for auditing.

How You Apply

To apply to this program, students must complete an MCTC Application. New students are accepted into this program for fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

Cinema Studies Certificate

Credits: 24

Listed below are the courses required in the Cinema Studies Certificate:

Course #	Course Name	Credits
CIST 1101	Cinema History 1	3.00
CIST 1102	Cinema History 2	3.00
CIST 1103	World Cinema	3.00
CIST 1104	Documentary History	3.00
CIST 1105	Topics in Cinema History	3.00
ENGL 1110	Required General Education Elective . . .	3.00
ENGL 1111	Required General Education Elective . . .	3.00
Recommended General Education Courses (see below) .		3.00

General Education Courses (9 credits)

To earn the Cinema Studies Certificate, students are required to successfully complete nine credits of general education including MnTC Goal Area 1.

Note: ENGL 1110 and ENGL 1111 satisfy Goal Area 1.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the three remaining general education course credits:

Course #	Course Name	Credits
JOUR 1000	Introduction to Mass Communication (MnTC 9)	3.00
ARTS 1110	Introduction to Arts (MnTC 6, 8)	3.00
SPCH 1011	Group Process and Discussions (MnTC 1)	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7)	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5, 8)	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10)	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8)	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7)	3.00
THTR 1104	Introduction to Acting (MnTC 6)	3.00

Cinema: Cinematic Visual Effects

- Cinematic Visual Effects Certificate—18 credits

What You Will Learn

The Cinematic Visual Effects Certificate at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate. This program will give you the skills to integrate traditionally acquired film/video footage with visual effects processes like motion graphics, compositing, 2D animation and green/blue screen work. Visual Effects students will establish strong collaborations with Post-production, Directing and Cinematography students in the Division. Program faculty are committed to following emerging technologies and will incorporate such technologies whenever possible.

MCTC's Cinematic Visual Effects Certificate offers the most affordable and unique sound education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and post-production equipment.

The Cinema Division's faculty — all active professionals — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

The program is physically demanding, since the process of transporting and setting up large equipment requires a substantial amount of heavy lifting. You will also spend considerable time outside the classroom working on productions.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- As they are completing the Cinema Production Certificate during their first year, students should meet with their faculty and their advisor/counselor regarding appropriate sequencing of required coursework and to choose a major concentration for their second year.
- Students seeking to reenroll in coursework they have successfully completed must have the permission of the instructor.
- Visual Effects courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- Local and national independent producers
- Independent home video distribution companies
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- National and local advertising agencies
- Freelancing

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website.)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria. Please see Admissions for details and a projected open seat date for your initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, you must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of your reading placement test scores.
- **Writing:** To enroll in these program courses, you must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of your writing placement test scores.
- **Math:** To enroll in these program courses, you must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of your math placement test scores. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

This program requires that you complete a First Year Core Curriculum Cinema Production Certificate.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Cinematic Visual Effects Certificate

Credits: 18

First Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
CVFX 2101	Visual Effects I: Motion Graphics	3.00
CVFX 2102	Visual Effects II: Compositing/ Postproduction Environment	4.00
One course from MnTC Goal Area 1		3.00

Second Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
CVFX 2103	Visual Effects III: Stereoscopy	4.00
CVFX 2104	Visual Effects Advance Project	4.00

Cinema: Cinematography

- Cinematography A.S. Degree—64 credits

What You Will Learn

The Cinematography Program at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate courses. This program will train you in the art and craft of Cinematography using a combination of aesthetic, technical and theoretical approaches, specializing in the photography of motion pictures. You will use both film and electronic media to record images while developing solid skills in camera operation, dramatic lighting, and previsualization. Cinematography students will establish strong collaborations with Directing students, as well as with the other programs in the division. Program faculty are committed to following emerging technologies and will incorporate such technologies whenever possible.

MCTC's Cinematography Program offers the most affordable cinematography education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach, and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and postproduction equipment.

The Cinema Division's faculty — all active professionals with graduate degrees — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

The program is physically demanding since the process of transporting and setting up large equipment requires a substantial amount of heavy lifting. You will also spend considerable time outside the classroom working on productions.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- As they are completing the Cinema Production Certificate during their first year, students should meet with their faculty and their advisor/counselor regarding appropriate sequencing of required coursework and to choose a major concentration for their second year.

- Students seeking to reenroll in coursework they have successfully completed must have the permission of the instructor.
- Cinematography courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- Local and national independent producers
- Independent home video distribution companies
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- National and local advertising agencies
- As a freelancer

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria.

Please see Admissions for details and a projected open seat date for the initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Cinematography A.S. Degree

Credits: 64

Introductory Courses:

This program requires that you complete a First Year Core Curriculum Cinema Production Certificate before choosing the Cinematography major in the second year.

First Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1101	Cinema Production 1	3.00
CIST 1101	Cinema History 1	3.00
SCRN 1101	Introduction to Cinematic Storytelling	3.00
ENGL 1110	College English 1.	3.00
Recommended General Education Courses (see list at right)		3.00

Second Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1102	Cinema Production II	3.00
CIST 1102	Cinema History II	3.00
SCRN 1102	Writing the Short Fiction Screenplay	3.00
CIPR 1103	Sound for Image	3.00
ENGL 1111	College English II	3.00

Advanced Courses (Second Year)

(Listed below are additional courses required for completion of the Cinematography program.)

Course #	Course Name	Credits
CINE 2103	Camera and Lighting	4.00
CINE 2104	Cinematography I	4.00
CINE 2105	Cinematography II	4.00
DREC 2106	Documentary Production	4.00
CINE 2107	Internship	3.00
CIST 1103	World Cinema	3.00
CIST 1104	Documentary History	3.00
General Education Courses (see list at right)		9.00

General Education Courses (30 credits)

To earn the Cinematography A.S. degree, students are required to successfully complete:

- 30 credits of general education;
- 18 credits of program-required general education courses, including CIST 1101 and CIST 1102; CIST 1103 and CIST 1104; ENGL 1110 & ENGL 1111; and
- 12 credits are recommended general education selected from at least six of the MnTC goal areas. As a general rule, a minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10. (See list of recommended courses above right).

Note: ENGL 1110 satisfies Goal Area 1. CIST 1101, 1102, 1103 and 1104 satisfy Goal Areas 6, 7 and 8.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the 12 remaining general education course credits:

Course #	Course Name	Credits
JOUR 1000	Introduction to Mass Communication (MnTC 9)	3.00
ARTS 1110	Introduction to Arts (MnTC 6, 8)	3.00
SPCH 1011	Group Process and Discussions (MnTC 1)	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7)	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5, 8)	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10)	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8)	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7)	3.00
THTR 1104	Introduction to Acting (MnTC 6)	3.00

Cinema: Digital Animation

- Digital Animation Certificate—18 credits

What you will learn

The Digital Animation Certificate at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate. This program will train you in the art and craft of digital animation using a combination of aesthetic, technical and theoretical approaches, specializing in three-dimensional computer based animation, computer graphic imaging and special effects. Animation students will establish strong collaborations with students from Directing, Editing and Cinematography programs in the Division. Program faculty are committed to following emerging technologies and will incorporate such technologies whenever possible.

MCTC's Digital Animation Certificate offers the most affordable and unique animation education in Minnesota. Courses in this program require a high level of commitment. You will also spend considerable time outside the classroom working on productions. Your instructors are passionate about what they teach and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and post-production equipment.

The Cinema Division's faculty — all active professionals — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- As they are completing the Cinema Production Certificate during their first year, students should meet with their faculty and their advisor/counselor regarding appropriate sequencing of required coursework and to choose a major concentration for their second year.
- Students seeking to reenroll in coursework they have successfully completed must have the permission of the instructor.
- Digital Animation courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- Local and national independent producers
- Independent home video distribution companies
- In house production departments within retail stores and corporations
- Local and national television, cable stations and networks
- National and local advertising agencies
- As a freelance

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria.

Please see Admissions for details and a projected open seat date for the initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, you must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of your reading placement test score.
- **Writing:** To enroll in these program courses, you must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of your writing placement test score.
- **Math:** To enroll in these program courses, you must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of your math placement test score. In addition, students must demonstrate computer literacy skills by passing the college's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Digital Animation Certificate

Credits: 18

First Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ANIM 2101	Introduction to Digital Animation	3.00
One course from MnTC Goal Area 1		3.00

Second Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ANIM 2102	Advanced 3D Animation.	4.00
ANIM 2103	Advanced CGI Software	4.00
ANIM 2104	Animation — Advanced Project	4.00

Cinema: Directing and Producing

- Directing and Producing A.S. Degree—64 credits

What You Will Learn

The Directing Program at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate courses. It has been designed to work in concert with three other programs in the division: Screenwriting, Cinematography and Editing. This program combines a pragmatic immersion in the art, craft, business and discipline of directing with a knowledge of narrative structures and conventions to produce directors who are also compelling storytellers. You, as a directing student, will develop productive collaborations with members of your cast and crew in order to interpret scripts, elicit dramatic performances, determine camera coverage strategies, design the right “look” and emotional tone, and supervise the shape and arrangement of the final work in the cutting room.

MCTC’s Directing and Producing Program offers the most affordable movie directing education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach, and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and postproduction equipment.

The Cinema Division’s faculty — all active professionals — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

The program is physically demanding, since the process of transporting and setting up large equipment requires a substantial amount of heavy lifting. You will also spend considerable time outside the classroom working on productions.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- During the first year as students work on earning the Cinema Production Certificate, they should meet with faculty and their advisor/counselor about appropriate sequencing of required coursework and to choose a major concentration for the second year.
- Students seeking to reenroll in coursework they have successfully completed must obtain permission from their instructor.
- Directing and Producing courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- With local and national independent producers
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- Local and national advertising agencies
- As a freelancer

How You Apply

To apply to this program, students must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria. Please contact Admissions for details and a projected open seat date for your initial course.

New students are accepted into this program in the fall semester only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

Directing and Producing A.S. Degree

Credits: 64

Introductory Courses

This program requires students to complete a first-year core curriculum culminating in the Cinema Production Certificate, before choosing the Directing major in the second year.

First Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1101	Cinema Production 1	3.00
SCRN 1101	Introduction to Cinematic Storytelling	3.00
CIST 1101	Cinema History 1	3.00
ENGL 1110	College English 1.	3.00
Recommended General Education Courses (see list at right)		3.00

Second Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1102	Cinema Production 2	3.00
SCRN 1102	Writing the Short Fiction Screenplay	3.00
CIPR 1103	Sound for Image	3.00
CIST 1102	Cinema History 2	3.00
ENGL 1111	College English 2.	3.00

Advanced Courses

Listed below are second-year additional courses required for completion of this program:

Course #	Course Name	Credits
DREC 2103	Producing Independent Cinema.	4.00
DREC 2104	Directing 1	4.00
DREC 2105	Directing 2.	4.00
DREC 2106	Documentary Production	4.00
DREC 2107	Internship	3.00
CIST 1103	World Cinema.	3.00
CIST 1104	Documentary History	3.00
General Education Courses (see list below)		9.00

General Education Courses (30 credits)

To earn the Directing and Producing A.S. degree, students are required to successfully complete 30 credits of general education as follows:

- 18 credits of program-required general education courses: CIST 1101 and CIST 1102; CIST 1103 and CIST 1104; ENGL 1110 and ENGL 1111.
- 12 credits of recommended general education selected from at least six of the MnTC Goal Areas. As a general rule, a minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10. (See list of recommended courses below).

Note: ENGL 1110 satisfies Goal Area 1. CIST 1101, 1102, 1103 and 1104 satisfy Goal Areas 6, 7 and 8.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the 12 remaining general education course credits:

Course #	Course Name	Credits
JOUR 1000	Introduction to Mass Communication (MnTC 9).	3.00
ARTS 1110	Introduction to Arts (MnTC 6, 8).	3.00
SPCH 1011	Group Process and Discussions (MnTC 1).	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7).	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5, 8).	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10).	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8).	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7).	3.00
THTR 1104	Introduction to Acting (MnTC 6).	3.00

Cinema: Editing and Postproduction

- Editing and Postproduction A.S. degree—64 credits

What You Will Learn

The Editing and Postproduction Program at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate courses and builds on the first year Cinema Production core curriculum. During that year, you will learn the beginning levels of all aspects of cinema production and the art of collaboration during the production of your projects. After being exposed to these fundamental skills you will have an understanding of where and what your strengths and interests are. This will enable you to choose a specialization.

In the Editing and Post-Production program, you will be introduced to a combination of aesthetic and technical approaches used in the finishing phases of your cinema projects.

Some of the technical skills you will acquire are: Acuity on professional picture and sound editing software, DVD authoring and special effects software; knowing the differences between editing on film and video; editing with Chroma Key, 2D and 3D effects/compositing; knowing how to prepare a press kit; and the steps to submitting your projects to screening venues (i.e. film festivals, public television).

You will also learn the aesthetic approaches to different types of projects (i.e. documentary, narrative, commercials), through studying a diverse group of master editors. Some of the considerations you will encounter are: editing to advance the story; rhythm and pacing; creating emotional impact with editing; understanding 2- and 3-dimensional space through editing and creating a film editor reel.

MCTC's Editing and Postproduction Program offers the most affordable Postproduction education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach, and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and post-production equipment.

The Cinema Division's faculty — all working professionals with graduate degrees — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- As they are completing the Cinema Production Certificate during their first year, students should meet with their faculty and their advisor/counselor regarding appropriate sequencing of required coursework and to choose a major concentration for their second year.
- Students seeking to reenroll in coursework they have successfully completed must obtain permission from their instructor.
- Editing and Postproduction courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- With local and national independent producers
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- National and local advertising agencies
- As a freelancer

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria. Please see Admissions for details and a projected open seat date for your initial course.

New students are accepted into this program for **fall semester only**.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

Editing and Postproduction A.S. Degree

Credits: 64

This program requires that students complete a first-year core curriculum Cinema Production Certificate, before choosing the Editing and Postproduction major in the second year.

First Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1101	Cinema Production 1	3.00
CIST 1101	Cinema History 1	3.00
SCRN 1101	Introduction to Cinematic Storytelling	3.00
ENGL 1110	College English 1.	3.00
Recommended General Education Courses (see list at right)		3.00

Second Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1102	Cinema Production 2	3.00
CIST 1102	Cinema History 2	3.00
SCRN 1102	Writing the Short Fiction Screenplay	3.00
CIPR 1103	Sound for Image	3.00
ENGL 1111	College English 2.	3.00

Advanced Courses (Second Year)

(Listed below are second-year courses required for completion of the Editing and Postproduction degree.)

Course #	Course Name	Credits
EDIT 2103	Postproduction	4.00
EDT 2104	Editing 1	4.00
EDIT 2105	Editing 2	4.00
DREC 2106	Documentary Production	4.00
EDIT 2107	Internship	3.00
CIST 1103	World Cinema.	3.00
CIST 1104	Documentary History	3.00
Recommended General Education Courses (see below)		9.00

General Education Courses (30 credits)

To earn the Editing and Postproduction A.S. degree, students are required to successfully complete 30 credits of general education as follows:

- 18 credits of program-required general education courses: CIST 1101 and CIST 1102; CIST 1103 and CIST 1104; ENGL 1110 and ENGL 1111; and
- 12 credits of recommended general education selected from at least six of the MnTC Goal Areas. As a general rule, a minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10. (See list of recommended courses below).

Note: ENGL 1110 satisfies Goal Area 1. CIST 1101, 1102, 1103 and 1104 satisfy Goal Areas 6, 7 and 8.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the 12 remaining general education course credits:

Course #	Course Name	Credits
JOUR 1000	Introduction to Mass Communication (MnTC 9)	3.00
ARTS 1110	Introduction to Arts (MnTC 6, 8)	3.00
SPCH 1011	Group Process and Discussions (MnTC 1)	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7)	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5, 8)	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10)	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8)	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7)	3.00
THTR 1104	Introduction to Acting (MnTC 6)	3.00

Cinema: Screenwriting

- Screenwriting A.S. Degree—64 credits

What You Will Learn

The Screenwriting Program at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate.

You will learn how to develop, write, rewrite, analyze and “cover” screenplays of all kinds, including those for television, documentaries and advertising. You will master the intricate art of combining powerful images and inspiring dialogue, and grow as an innovative screenwriter while “telling” exciting stories in your unique voice. By the time you complete the Screenwriting degree, you will be ready to address all issues related to dramatic and nonfiction screenwriting, as well as all underlying business and legal aspects.

The program provides an interactive learning environment wherein you will share your ideas and your scripts and get feedback in a workshop setting. You will collaborate with Directing and Producing students in the Cinema Division to get your work produced. You will have the opportunity to meet and work with local writers, producers, and guest lecturers from around the country, as well as pitch your finished scripts to professionals from Los Angeles and New York.

MCTC’s Screenwriting Program offers the most affordable screenwriting education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach, and they will hold you to professional standards and expectations.

The Cinema Division’s faculty — all active professionals with graduate degrees — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

MCTC has an articulation agreement with Metropolitan State University.

NOTE:

- During the first year, as students are earning their Cinema Production Certificate, they should meet with their faculty and their advisor/counselor about appropriate sequencing of required coursework and to choose a major concentration for their second year.
- Students seeking to reenroll in coursework they have successfully completed must obtain permission from their instructor.
- Screenwriting courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- Local and national independent producers
- Independent home video distribution companies
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- National and local advertising agencies
- As a freelancer

How You Apply

To apply to this program, students must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website.)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria. Please see Admissions for details and a projected open seat date for your initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores. In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

Screenwriting A.S. Degree

Credits: 64

This program requires that you complete a first-year core curriculum Cinema Production Certificate, before choosing the Screenwriting major in the second year.

First Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1101	Cinema Production 1	3.00
CIST 1101	Cinema History 1	3.00
SCRN 1101	Introduction to Cinematic Storytelling	3.00
ENGL 1110	College English 1.	3.00
Recommended General Education Courses (see list at right)		3.00

Second Semester Core Curriculum

Course #	Course Name	Credits
CIPR 1102	Cinema Production 2	3.00
CIST 1102	Cinema History 2	3.00
SCRN 1102	Writing the Short Fiction Screenplay	3.00
CIPR 1103	Sound for Image	3.00
ENGL 1111	College English 2.	3.00

Advanced Courses (Second Year)

(Listed below are second-year courses required for your completion of the Screenwriting degree.)

Course #	Course Name	Credits
SCRN 2103	Script Analysis and Structure	4.00
SCRN 2104	Writing the Nonfiction Scripts	4.00
SCRN 2105	Writing the Feature-Length Scripts	4.00
SCRN 2106	Screenwriting Practicum	4.00
SCRN 2107	Internship Lab	3.00
CIST 1103	World Cinema	3.00
CIST 1104	Documentary History	3.00
General Education Courses (see list at right)		9.00

General Education Courses (30 credits)

To earn the Screenwriting A.S. degree, students are required to successfully complete 30 credits of general education as follows:

- 18 credits of program-required general education courses, including CIST 1101 and CIST 1102; CIST 1103 and CIST 1104; ENGL 1110 & ENGL 1111; and
- 12 credits of recommended general education selected from at least six of the MnTC Goal Areas. As a general rule, a minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10. (See list of recommended courses below).

Note: ENGL 1110 satisfies Goal Area 1. CIST 1101, 1102, 1103 and 1104 satisfy Goal Areas 6, 7 and 8.

Recommended General Education Courses

Listed below are the General Education courses from which you can choose to satisfy the 12 remaining general education course credits:

Course #	Course Name	Credits
JOUR 1000	Introduction to Mass Communication (MnTC 9)	3.00
ARTS 1110	Introduction to Arts (MnTC 6, 8)	3.00
SPCH 1011	Group Process and Discussions (MnTC 1)	3.00
SPCH 1012	Intercultural Communication (MnTC 1, 7)	3.00
PHIL 1110	Critical Thinking (MnTC 6)	3.00
PSCI 1104	World Politics (MnTC 5, 8)	3.00
PSCI 1137	Environment, Politics and Society (MnTC 5, 10)	3.00
INFS 2600	Ideas, Censorship and Politics (MnTC 5, 8)	3.00
ACES 1152	Popular Culture in 20th Century America (MnTC 6, 7)3.00	
THTR 1104	Introduction to Acting (MnTC 6)	3.00

Cinema: Sound for Cinema

- Sound for Cinema Certificate—18 credits

What You Will Learn

The Sound for Cinema Certificate at MCTC is open to second-year Cinema Division students who have completed the Cinema Production Certificate. This program will train you in the art and craft of sound recording and mixing using a combination of aesthetic, technical and theoretical approaches, specializing in the recording and mixing of sound of motion pictures. Sound for Cinema students will establish strong collaborations with Directing students as well as with the other programs in the Division. Program faculty are committed to following emerging technologies and will incorporate such technologies whenever possible.

MCTC's Sound for Cinema Certificate offers the most affordable and unique sound education in Minnesota. Courses in this program require a high level of commitment. Your instructors are passionate about what they teach and they will hold you to professional standards and expectations. The resources and facilities in this innovative program are outstanding and include film as well as electronic production and postproduction equipment.

The Cinema Division's faculty — all active professionals — will guide you as you learn to express yourself using moving images and sound. You can also take advantage of diverse internship opportunities in the Twin Cities area, one of the largest commercial and industrial markets in the Midwest.

The program is physically demanding, since the process of transporting and setting up large equipment requires a substantial amount of lifting. You will also spend considerable time outside the classroom working on productions.

MCTC has an articulation agreement with Augsburg College.

NOTE:

- As they are completing the Cinema Production Certificate during their first year, students should meet with their faculty and their advisor/counselor regarding appropriate sequencing of required coursework and to choose a major concentration for their second year.
- Students seeking to reenroll in coursework they have successfully completed must have the permission of the instructor.
- Cinematography courses are **not** available for auditing.

Where You Could Work

- Local and national film and video production houses
- Local and national independent producers
- Independent home video distribution companies
- In-house production departments within retail stores and corporations
- Local and national film studios
- Local and national television, cable stations and networks
- National and local advertising agencies
- Freelancing

How You Apply

To apply to this program, you must complete two applications:

- 1) An **MCTC Application** (downloadable from www.minneapolis.edu)
- 2) A **Cinema Division Application** (downloadable from the Cinema Division website.)

Initial course enrollment is determined by a waiting list intended to allow equitable admission according to specific criteria. Please see Admissions for details and a projected open seat date for your initial course.

New students are accepted into this program for **fall semester only**.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, you must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of your reading placement test scores.
- **Writing:** To enroll in these program courses, you must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of your writing placement test scores.
- **Math:** To enroll in these program courses, you must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of your math placement test scores. In addition, you must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Sound for Cinema Certificate

Credits: 18

First Semester Core Curriculum

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
SNDC 2101	Production Sound for Motion Pictures. .	4.00
SNDC 1310	Introduction to Sound	3.00
One course from MnTC Goal Area 1		3.00

Second Semester Core Curriculum

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
SNDC 2102	Post-Production Sound for Motion Pictures.	4.00
SNDC 2103	Advanced Sound for Cinema Project . . .	4.00

Community Development

- Community Development A.S. Degree—60 credits

What You Will Learn

MCTC's new Community Development A.S. degree program will prepare you for challenging careers in community development corporations, urban neighborhood revitalization, community organizations, environmental impact assessment, private developers, banks, nonprofits and government agencies. This program intersects community development, community organizing, and indigenous cultures. This combination promises to educate a future generation of community leaders. You will understand indigenous cultures and the broader community in a changing global environment; learn to demonstrate an awareness of approaches, methods, and techniques of community development and community indigenous cultural groups, focusing especially on Native Americans; and you will examine the roles and responsibilities of citizen leaders, citizen participants, community developers and organizers. This area of study enables you to better understand the links between local action and the process of policymaking within a larger system, while considering finances, assessment and development of the community.

This program provides you with courses designed to give you the practical skills necessary to research issues of interest within the area of Community Development. Indigenous cultures, economic problems, accounting and marketing, management, global studies, and reclaiming democracy are examples of the types of courses required for this degree. You will learn various skills that are important to gain for employment. You will learn how to effectively work cooperatively in a team setting and as an individual to be a leader in your community.

MCTC has an articulation agreement with St. Mary's University.

Where You Could Work

- Federal, state, county, or local governments
- Banks and grant programs
- Private and nonprofit agencies
- Community organizations
- Neighborhood associations
- Neighborhood revitalization programs
- Community Education

Students are accepted into this program for fall and spring terms.

Courses in this program require achievement of the following program admission requirements:

- **Math:** Placement into MATH 0070 or completion of MATH 0060.
- **English:** Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.
- **Reading:** Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

Community Development A.S. Degree

Credits: 60

Required Core Courses

Course #	Course Name	Credits
AMIS 1120	Community Development and Indigenous Cultures	3.00
ECON 2500	Contemporary Economic Problems	3.00
BUSN 1140	Introduction to Business	3.00
BUSN 2301	Community Development and Development Process	3.00
BUSN 1142	Principles of Marketing	4.00
BUSN 2202	Financial Accounting	4.00
BUSN 2302	Community Development and Project Management	3.00
BUSN 2252	Principles of Management	4.00
BUSN 2254	Entrepreneurship	3.00

Required Supporting Courses

Course #	Course Name	Credits
INFS 1000	Information Literacy and Research Skills	2.00
PSCI 1111	Reclaiming Democracy	1.00
ENGL 1110	College English 1	3.00
ACES 1500	Introduction to Global Studies	3.00
AMST 1132	Ethnic America	3.00
SPCH 1012	Intercultural Communication	3.00
Electives	9.00

Recommended Courses for Goal Area Electives:

Goal Area #9	Course Name	Credits
INFS 2510	Necessary Illusions: Intro to the Information Age	3.00
INFS 2520	Alternative Knowledge: How Radical Ideas are Communicated	3.00
ECON 1000	Consumer Economics	3.00

Goal Area #10	Course Name	Credits
BIOL 1136	Environmental Science	3.00
PSCI 1137	Environment, Politics and Society	3.00
SOCI 1160	Technology, Culture and Society	3.00
WOST 2212	Women, Ecofeminism and Development	3.00

General Education Coursework (27 credits)

To complete the Community Development A.S. degree, students must successfully complete 27 credits of general education coursework. The coursework is outlined above. Six credits from Goal Area 9 and 10 are required with recommended courses listed above.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Community Health Worker

- Community Health Worker Certificate—11 credits

What You Will Learn

MCTC's Community Health Worker (CHW) program will prepare you to obtain employment in a variety of organizations. As a Community Health Worker, you will perform a broad range of health-related functions and play an important role in bridging the gap between cultures and health care systems. You will work with health care organizations to increase cultural competence, improve access to health care for racial and ethnic minorities, improve the quality of care for the chronically ill, promote healthy communities, and educate families about access to and use of health care coverage. You will learn the six basic core competencies appropriate to job placement.

The 11-credit certificate curriculum will provide a blend of classroom and field-based learning to create synergies that lead to an effective training environment for new learners interested in becoming Community Health Workers (CHW). As a CHW, you will understand and can act as a culture broker between your own community and systems of care. You will perform basic health advising and health promotion and link community members to health and social service systems.

The CHW Program requires:

- Grades of "C" (2.0) or above in all CHW courses.
- **Passing of a criminal background check prior to being placed in a CHW internship.**
The College cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Where You Could Work

- Federal, state, county, or local health departments
- Human services agencies and organizations
- Private and/or nonprofit clinics

Students are accepted into this program for fall term.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052 on the basis of their reading placement test scores.

Community Health Worker Certificate

Credits: 11

Course #	Course Name	Credits
CMHW 1000	The Community Health Role: Advocacy and Outreach	3.00
CMHW 1015	Organizations and Resources: Community and Personal Strategies	2.00
CMHW 1025	The Community Health Workers's Role in Teaching and Capacity-Building	2.00
CMHW 1035	The Community Health Worker: Legal and Ethical Responsibilities	1.00
CMHW 1045	Community Health Worker: Coordination, Documentation and Reporting	1.00
CMHW 1055	Communication Skills and Cultural Competence	2.00

Computer Forensics

- Computer Forensics A.A.S. Degree—64 credits

What You Will Learn

MCTC's Information Technology program has three A.A.S. awards: Computer Forensics, Computer Support and Network Administration, and Software Development, as well as a number of diplomas and certificates.

MCTC's Computer Forensics A.A.S. is a unique degree program that combines knowledge and skills of a number of areas including information technology, information security, computer forensics, criminal justice, law, investigation and ethics. Computer forensics professionals are primarily employed by governmental and legal agencies that specialize in cybercrime investigations. Instructors with business and industry experience lead classes and cover the various program areas.

In addition, you will have the chance to work in groups with other class members to learn valuable teamwork and communication skills that reflect the real-world soft-skill requirements. You will also have the opportunity to participate in various student club activities, technology competitions and industry events.

As a student, you will also have the opportunity to participate in valuable learning activities such as internships, student-learning experiences and the Information Technology Club. Upon completion of the program, you will have gained strong technical problem-solving, interpersonal and communication skills that will be useful as you enter the workforce.

MCTC has articulation agreements with Metropolitan State University, Minnesota State University—Moorehead, St. Mary's University and St. Scholastica for students who wish to pursue a four-year degree.

Where You Could Work

- Help desk centers
- Technical support
- Information technology departments in government and industry
- Network administration
- Internet service providers
- IT consulting firms
- Training centers
- Technology vendors

Computer Forensics A.A.S Degree

Credits: 64

Area 1: ITEC Core (14 credits)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Area 2: Criminal Justice/Law Enforcement Core (12 credits)

Course #	Course Name	Credits
PSCI 1101	American Government.	3.00
PSCI 2000	Constitutional Law.	3.00
SOCI 2155	Introduction to Criminal Justice	3.00
LAW 2230	Legal Issues and Law Enforcement	3.00

Area 3: Advanced ITEC/CF Courses (18 credits)

Course #	Course Name	Credits
ITEC 1310	Microcomputer System Maintenance	4.00
ITEC 2710	Microsoft Network Administration	4.00
	OR ITEC 1475 Linux System Administration	
	OR ITEC 2880 Cisco Network Administration	
ITEC 2865	Internet/Intranet Security	4.00
ITEC 2855	Computer Forensics	4.00
ITEC 2950	Information Technology Career Preparation	2.00

Area 4: General Education Courses (20 credits—9 required and 11 electives)

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
ENGL 1111	College English 2	3.00
SPCH 1000	Fundamentals of Communication.	3.00

General Education Electives (A minimum of three credits from MnTC Goal Areas 7, 8, 9 or 10). 11.00

*Enrollment in LAWE courses for non-LAWE majors must be approved by the Center for Criminal Justice and Law Enforcement (CCJLE) (an MCTC programs location—St. Paul) director. Please call 651-999-7600.

General Education (20 credits):

To complete the Computer Forensics A.A.S. degree, students are required to successfully complete 20 credits of general education coursework. The required courses are ENGL 1110, ENGL 1111, SPCH 1000 and a minimum of three credits from Goal Areas 7, 8, 9 or 10. It is strongly recommended that students seeking transfer into Metropolitan State University's B.A.S. in Computer Forensics complete MATH 1110 and MATH 1150. Program prerequisites: Ready for ENGL 1110.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or be declared ready to enroll in MATH 0080 on the basis of their math placement test scores.

Computer Science

- Transfer courses—28 credits

What You Will Learn

Minneapolis Community and Technical College’s Computer Science curriculum serves students in three ways:

Elective Credits for the Associate in Arts Degree

If you are seeking an A.A. degree, classes are available to fulfill elective credits and provide additional skills for careers in both computer and business fields.

Transfer Courses

If you are planning to seek a four-year college degree in computer science, engineering, natural sciences or social sciences, the computer programming classes meet the needs of most transfer students who must have introductory programming courses for their majors.

Computer Literacy

Both CSCI 1100: Introduction to Computers and CSCI 1200: Computer Application in Home and Business fulfill the computer literacy requirement for the A.A. degree.

Transfer Courses

Credits: 28

Course #	Course Name	Credits
CSCI 1100	Introduction to Computers	3.00
CSCI 1200	Computer Applications in Home and Business	3.00
CSCI 1500	Introduction to Programming and Problem Solving	3.00
CSCI 1700	Introduction to Computer Programming in Java	3.00
CSCI 1730	Introduction to Object-Oriented Programming With C++.	4.00
CSCI 1901	Structure of Computer Programming 1 . .	4.00
CSCI 1902	Structure of Computer Programming 2 .	4.00
CSCI 2011	Discrete Mathematics	4.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to work closely with a counselor or advisor to plan an appropriate program for transfer.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Computer Software Development

- Computer Software Development A.A.S. Degree—64 credits
- Software Developer Diploma—54 credits
- JAVA Developer Certificate—29 credits
- Visual BASIC .NET Developer Certificate—29 credits
- Visual C# Developer Certificate—29 credits
- Web Developer Certificate—29 credits
- Database Specialist Certificate—29 credits
- Open Source Developer Certificate—26 credits
**Pending MnSCU approval*
- Mobile Application Developer Certificate—25 credits
**Pending MnSCU approval*

Software Development A.A.S. Degree

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design.	4.00
ITEC 2950	Information Technology Career Preparation	2.00

Choose two sets of languages for a total of 16 credits:

ITEC 1750	Visual BASIC .Net/1	4.00
ITEC 2450	Visual BASIC .Net/2	4.00
ITEC 1771	Java /1	4.00
ITEC 2541	Java /2	4.00
ITEC 1700	Visual C# .NET/1	4.00
ITEC 2400	Visual C# .NET/2	4.00
ITEC 1555	Web Programming.	4.00
ITEC 2555	Web Client/Server Programming.	4.00

Advanced credits

General Education Credits (see below)	16.00
Electives Block Credits (see below)	8.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Elective Courses (8 credits)

Course #	Course Name	Credits
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 1475	Linux System Administration	4.00
ITEC 1585	E-Commerce Development and Implementation	4.00
ITEC 1725	Mobile Application Development	4.00
ITEC 2075	Application Support and Resource Utilization	4.00
ITEC 2245	Computer Gaming Design and Development.	4.00
ITEC 2410	Applications Development Using Tools.	4.00
ITEC 2855	Computer Forensic.	4.00
ITEC 2900	Information Technology Internship	2.00

General Education Courses (16 credits)

To complete the Computer Software Development A.A.S. degree, students are required to successfully complete 16 credits of general education coursework. The coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are required are ENGL 1110, ENGL 1111, and SPCH 1000. MATH 1110, MATH 1150 or MATH 1160 is recommended.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or be declared ready to enroll in MATH 0080 on the basis of their math assessment test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Software Developer Diploma

Credits: 54

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design	4.00
ITEC 2950	Information Technology Career Preparation	2.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

Choose two sets of languages for a total of 16 credits:

ITEC 1750	Visual BASIC .Net/1	4.00
ITEC 2450	Visual BASIC .Net/2	4.00
ITEC 1771	Java/1.	4.00
ITEC 2541	Java/2.	4.00
ITEC 1700	Visual C# .NET/1	4.00
ITEC 2400	Visual C# .NET/2	4.00
ITEC 1555	Web Programming	4.00
ITEC 2555	Web Client/Server Programming.	4.00

Advanced credits

General Education Credits (see below)	6.00
Electives Block Credits (see below)	8.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Elective Courses (8 credits)

Course #	Course Name	Credits
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 1475	Linux System Administration	4.00
ITEC 1585	E-Commerce Development and Implementation	4.00
ITEC 1725	Mobile Application Development	4.00
ITEC 2075	Application Support and Resource Utilization.	4.00
ITEC 2245	Computer Gaming Design and Development.	4.00
ITEC 2410	Applications Development Using Tools	4.00
ITEC 2855	Computer Forensics	4.00
ITEC 2900	Information Technology Internship	2.00

General Education Courses (6 credits)

To complete the Software Developer Diploma, students are required to successfully complete six credits of general education coursework. The specific courses that are required are ENGL 1110 and SPCH 1000.

JAVA Developer Certificate

Credits: 29

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation	4.00
ITEC 1771	Java/1	4.00
ITEC 2541	Java/2	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design	4.00
General Education Courses (see below)		3.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Java Developer Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Visual BASIC .NET Developer Certificate

Credits: 29

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems. .	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation . .	4.00
ITEC 1750	Visual BASIC .Net/1	4.00
ITEC 2450	Visual BASIC .Net/2	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design	4.00
General Education Courses (see below)		3.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Visual BASIC .Net Developer Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Visual C# Developer Certificate

Credits: 29

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems. .	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation . .	4.00
ITEC 1770	Visual C#.NET/1	4.00
ITEC 2400	Visual C#.Net/2	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design	4.00
General Education Courses (see below)		3.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Visual C# Developer Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Web Developer Certificate

Credits: 29

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems. .	3.00

Advanced Courses

(Listed below are additional courses required for your completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation . .	4.00
ITEC 1555	Web Programming	4.00
ITEC 2555	Web Client/ Server Programming	4.00
*ITEC 2425	Infotech Project Management	4.00
OR		
*ITEC 2775	Systems Analysis and Design	4.00
General Education Courses (see below)		3.00

*Take one of the following: ITEC 2425 **OR** ITEC 2775.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Web Developer Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Database Specialist Certificate

Credits: 29

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems. .	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation . .	4.00
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 1770	Visual C#.Net/1 or Java/1 or VB/1.net (sets of 2)	4.00
ITEC 2400	Visual C#.Net/2 or Java/2 or VB/2.net (sets of 2)	4.00
General Education Courses (see below)		3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Database Specialist Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Open Source Developer Certificate

Credits: 26

First Semester

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design	3.00
ITEC 1475	Linux System Administration	4.00
ENGL 1110	College English 1	3.00

Second Semester

Course #	Course Name	Credits
ITEC 1771	JAVA Programming Part 1	4.00
ITEC 2541	JAVA Programming Part 2	4.00
ITEC 2855	MySQL Database Design and Implementation.	4.00

Please note that the second semester course ITEC 1771 has ITEC 1150 as a prerequisite. Students must complete ITEC 1771 prior to taking ITEC 2541.

Mobile Application Developer Certificate*

Credits: 25

**Pending MnSCU approval*

First Semester

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1255	Macintosh Operating Systems	3.00
ITEC 1150	Programming Logic and Design	3.00
ENGL 1110	3.00
OR		
SPCH 1000	3.00

Second Semester

Course #	Course Name	Credits
ITEC 1725	Mobile Applications Development	4.00
ITEC 2425	InfoTech Project Management	4.00
OR		
ITEC 2775	Systems Analysis and Design	4.00
ITEC 2410	Applications Development Using Tools . .	4.00

Computer Support and Network Administration

- Computer Support and Network Administration A.A.S. Degree—64 credits
- Computer Support and Network Administration Diploma—54 credits
- Information Assurance Professional Diploma—47 credits
- Cisco Network Administrator Certificate—26 credits
- Computer Security Specialist Certificate—26 credits
- Linux Network Administrator Certificate—26 credits
- Microsoft Network Administrator Certificate—26 credits
- Wireless Network Administrator Certificate—26 credits
- Database Administrator Certificate—26 credits
- Macintosh Support and Network Administration Certificate—26 credits
- Information Technology Fundamentals Certificate—21 credits

What You Will Learn

MCTC's Information Technology program has two A.A.S. awards: Computer Support and Network Administration and Software Development, as well as a number of diplomas and certificates.

MCTC's Computer Support and Network Administration degree provides a comprehensive, industry-focused training on network support and Internet technologies. You will learn how to install, configure, and maintain computer hardware, protocols, operating systems, software and Internet-working devices, with special emphasis on developing troubleshooting skills. Instructors with real-world experience lead classes and cover key topics such as network administration, client/server installation and support, Web server management, database implementation, and network security.

In addition, you will have the chance to work in groups with other class members to learn valuable teamwork and communication skills that reflect the real-world soft-skill requirements. You'll also have the opportunity to participate in various student club activities, technology competitions and industry events.

MCTC's Software Development degree will empower you to systematically analyze problems and create software solutions for business, scientific fields and government. You will learn how to create and maintain computer programs using a variety of computer programming languages. You will also study client/server architecture, data communications, data process principles, computer business applications, graphical user interfaces, Web development and e-business/e-commerce concepts.

To prepare programs for implementation, you will learn to design and develop in multiple programming languages. You'll also test and maintain programs to verify proper operation with data and reliability testing, including debugging to correct errors that are encountered. Many of the Information Technology courses are geared toward vendor-based and vendor-neutral industry standard certifications, such as those from Microsoft, Sun and CompTIA.

As a student, you will also have the opportunity to participate in valuable learning activities such as internships, student learning experiences and the Information Technology Club. Upon completion of the program, you will have gained strong problem-solving, interpersonal and communication skills that will be useful as you enter the workforce.

MCTC has an articulation agreement with Metropolitan State University, Minnesota State University—Moorhead, St. Mary's University, and St. Scholastica for students who wish to pursue a four-year degree.

Where You Could Work

- Help desk centers
- Technical support
- Information technology departments in government and industry
- Network administration
- Internet service providers
- IT consulting firms
- Training centers
- Technology vendors
- Software consulting firms
- Application software developers
- Web developers

Students are accepted into this program for fall, spring and summer terms.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Courses in this program require achievement of the following academic skill levels:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or be declared ready to enroll in MATH 0080 on the basis of their math assessment test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

Computer Support and Network Administration A.A.S. Degree

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Computer Programming Principles	3.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1310	Microcomputer System Maintenance	4.00
*ITEC 1475	Linux System Administration	4.00
OR		
*ITEC 2425	Information Technology Project Management	4.00
ITEC 2710	Microsoft Network Administration	4.00
ITEC 2865	Internet/Intranet Security: Implementation and Management	4.00
ITEC 2880	Cisco Network Administration	4.00
ITEC 2910	LAN Implementation and Management	4.00
ITEC 2950	Information Technology Career Preparation	2.00
General Education Courses (see next column).		16.00
Electives (see next column)		8.00

*Take one of the following: ITEC 2425 **OR** ITEC 1475.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (16 credits)

To complete the Computer Support and Network Administration A.A.S. degree, students are required to successfully complete 16 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1; and three credits from Goal Areas 7, 8, 9 or 10. Specific courses that are required are ENGL 1110, ENGL 1111 and SPCH 1000. MATH 1110, MATH 1150 or MATH 1160 is recommended.

Elective Courses (8 credits)

Course #	Course Name	Credits
ITEC 1255	Macintosh Operating Systems	3.00
ITEC 1375	Database Design and Implementation	4.00
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 1555	Web Programming	4.00
ITEC 1585	E-Commerce Development and Implementation	4.00
ITEC 1950	Computer Telephony Integration	4.00
ITEC 2075	Application Support and Resource Utilization	4.00
ITEC 2425	Information Technology Project Management 4.00	
ITEC 2725	Macintosh Network Administration	4.00
ITEC 2775	Systems Analysis and Design	4.00
ITEC 2795	Web Server and TCP/IP Implementation	4.00
ITEC 2820	Wireless LAN/WAN Administration	4.00
ITEC 2855	Computer Forensic	4.00
ITEC 2890	Firewall Implementation and Management	4.00
ITEC 2895	Security Implementation and Risk Analysis	4.00
ITEC 2900	Information Technology Internship 2.00–4.00	
ITEC 2990	Ethical Hacking and Network Defense	4.00

Computer Support and Network Administration Diploma

Credits: 54

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Computer Programming Principles	3.00
ITEC 1425	Data Communications	4.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Advanced Courses

Listed below are additional courses required for completion of this program. First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Course #	Course Name	Credits
ITEC 1310	Microcomputer System Maintenance . . .	4.00
ITEC 1475	Linux System Administration	4.00
ITEC 2910	LAN Implementation and Management	4.00
ITEC 2710	Microsoft Network Administration	4.00
ITEC 2865	Internet/Intranet Security: Implementation and Management	4.00
ITEC 2885	Cisco Network Administration	4.00
ITEC 2950	Information Technology Career Preparation	2.00
Electives		8.00
General Education Courses (see below)		6.00

General Education Courses (6 credits)

To complete the Computer Support and Network Administration Diploma, students are required to successfully complete six credits of general education coursework. A minimum of three credits must be completed from Goal Area 1, and three credits from Goal Areas 7, 8, 9 or 10.

Elective Courses (8 credits)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation . .	4.00
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 1475	Linux System Administration	4.00
ITEC 1555	Web Programming	4.00
ITEC 1585	E-Commerce Development and Implementation	4.00
ITEC 1950	Computer Telephony Integration	4.00
ITEC 2075	Application Support and Resource Utilization	4.00
ITEC 2425	Infotech Project Management	4.00
ITEC 2795	Web Server and TCP/IP Implementation	4.00
ITEC 2820	Wireless LAN/WAN Administration . . .	4.00
ITEC 2855	Computer Forensic	4.00
ITEC 2890	Firewall Implementation and Management	4.00
ITEC 2895	Security Implementation and Risk Analysis	4.00
ITEC 2900	Information Technology Internship	2.00–4.00

Information Assurance Professional Diploma

Credits: 47

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design.	3.00
ITEC 1250	Microsoft Windows Operating Systems. .	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1310	Microcomputer System Maintenance . .	4.00
*ITEC 2710	MS Network Administration	4.00
OR		
*ITEC 1475	Linux Network Administration	4.00
*ITEC 2875	Cisco Network Administration	4.00
OR		
*ITEC 2795	Web Server and TCP/IP Implementation	4.00
OR		
*ITEC 1375	Database Design and Implementation . .	4.00
OR		
*ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 2865	Internet/Intranet Security	4.00
ITEC 2895	Security Implementation and Risk Analysis	4.00
ITEC 2910	LAN Implementation and Management	4.00
General Education Courses (see below)		9.00

*Take one of the following: ITEC 2710 **OR** ITEC 1475.

*Take one of the following: ITEC 2875 **OR** ITEC 2795.

*Take one of the following: ITEC 1375 **OR** ITEC 1460.

Recommended for students interested in transferring to Metropolitan State's B.A.S. in Information Assurance:
MATH 1110—College Algebra
MATH 1150—Statistics

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (9 credits)

To complete the Information Assurance Professional diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from a minimum of three credits from Goal Area 1, and six credits from any Goal Area.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Cisco Network Administrator Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for your completion of this program)

Course #	Course Name	Credits
*ITEC 2710	MS Network Administration	4.00
OR		
*ITEC 1475	Linux Network Administration	4.00
ITEC 2875	Cisco Network Administration	4.00
ITEC 2880	Firewall Implementation and Management 4.00	

General Education Courses (see below)3.00

* Take one of the following: ITEC 2710 or ITEC 1475.

First semester courses will generally be selected with the assistance of a counselor or advisor during orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Cisco Network Administrator Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Computer Security Specialist Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
*ITEC 2710	MS Network Administration	4.00
OR		
*ITEC 1475	Linux Network Administration	4.00
ITEC 2865	Internet/Intranet Security: Implementation and Management	4.00
ITEC 2895	Security Implementation and Risk Analysis	4.00

General Education Courses (see below)3.00

* Take one of the following: ITEC 2710 OR ITEC 1475.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Computer Security Specialist Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Linux Network Administrator Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1475	Linux System Administration	4.00
ITEC 2425	Infotech Project Management	4.00
ITEC 2910	LAN Implementation and Management 4.00	

General Education Courses (see below)3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Linux Network Administrator Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Microsoft Network Administrator Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 2910	LAN Implementation and Management	4.00
ITEC 2425	Infotech Project Management	4.00
ITEC 2710	Microsoft Network Administration	4.00
	General Education Courses (see below)	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Microsoft Network Administrator Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Wireless Network Administrator Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
*ITEC 2710	Microsoft Network Administration	4.00
OR		
*ITEC 1475	Linux Network Administration	4.00
ITEC 2425	Infotech Project Management	4.00
ITEC 2820	Wireless LAN/WAN Administration	4.00
	General Education Courses (see below)	3.00

* Take one of the following: ITEC 2710 or ITEC 1475.

First semester courses will generally be selected with the assistance of a counselor or advisor during orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Wireless Network Administrator Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Database Administrator Certificate

Credits: 26

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1250	Microsoft Windows Operating Systems.	3.00
ITEC 1425	Data Communications.	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
ITEC 1375	Database Design and Implementation	4.00
ITEC 1460	SQL Server Database Design and Implementation	4.00
ITEC 2425	Infotech Project Management	4.00
	General Education Courses (see below)	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Database Administrator Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Information Technology Fundamentals Certificate

Credits: 21

First Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1150	Programming Logic and Design	3.00
ITEC 1250	Windows Operating System	3.00
OR		
ITEC 1255	Macintosh Operating Systems	3.00
ITEC 1425	Data Communications	4.00

Second Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ENGL 1110	College English 1.	3.00
OR		
SPCH 1000	Fundamentals of Communication	3.00
ITEC 1310	Microcomputer System Maintenance . .	4.00

Macintosh Support and Network Administration Certificate

Credits: 26

First Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ITEC 1100	Information Technology Concepts	2.00
ITEC 1110	Information Technology Skills	2.00
ITEC 1255	Macintosh Operating Systems	3.00
ITEC 1425	Data Communications	4.00
ENGL 1110	College English 1.	3.00
OR		
SPCH 1000	Fundamentals of Communication	3.00

Second Semester

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ITEC 2725	Macintosh Network Administration . . .	4.00
ITEC 2425	InfoTech Project Management	4.00
OR		
ITEC 2775	Systems Analysis and Design	4.00
ITEC 2910	LAN Implementation and Management	4.00

Construction Electricity

- Construction Electricity Diploma—64 credits

What You Will Learn

MCTC's Construction Electricity program will prepare you for a career in the construction electricity industry. You will learn to install and repair electrical wiring and systems in commercial, industrial and residential settings.

You will learn electrical theory as you perform in a hands-on practical laboratory. You will make electrical connections; install different types of wiring systems used in the trade; and develop a strong basic knowledge of transformers, motors and control systems.

MCTC's experienced instructors will give you extensive training in advanced motor control, conduit installation and bending techniques, and wiring. They also will emphasize special features of commercial electrical systems and show you how to use diagnostic procedures to determine what causes electrical failures.

To participate in the program, you must have above average manual dexterity, be able to lift 60 pounds, have excellent mathematics skills and be comfortable with moderate heights. All program participants must purchase approximately \$250 in hand tools.

During the first year of the program, you will take the same courses as students in the Heating, Ventilation, Air Conditioning and Refrigeration Program, which will give you valuable HVACR training. It also will give you the opportunity to complete both the HVACR and the Construction Electricity programs in just three years.

For more information on the program and its requirements, contact Dean Weikle at 612-659-6427 or Tom Hiltner at 612-659-6411.

Where You Could Work

- Electrical contracting companies
- Electrical supply companies
- Electrical power companies
- Property management companies
- Government inspection agencies

Students are accepted into this program fall semester only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ESOL 0041 or be declared ready to enroll in ENGL 0900 or ESOL 0051

on the basis of their writing placement test scores.

- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Construction Electricity Diploma

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester.)

Course #	Course Name	Credits
CNEL 1000	Introductory Electric Circuits.	2.00
HVAC 1000	Refrigeration Fundamentals.	2.00
HVAC 1050	Trade Tools and Test Instruments	2.00
HVAC 1100	Metal Fabrication	3.00
General Education Courses (see below)		9.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
CNEL 1025	Introduction to Electric Motors.	1.00
CNEL 1010	Semiconductor Circuits	2.00
CNEL 1050	A.C. Circuit Analysis	3.00
CNEL 1100	Single Phase Transformer Principles	1.00
CNEL 1150	Introductory Motor Controls.	2.00
CNEL 2000	Residential Wiring	4.00
CNEL 2050	Blueprint Reading.	2.00
CNEL 2150	Three Phase Systems and Transformers.	2.00
CNEL 2200	Electrical Raceway Installation.	3.00
CNEL 2250	National Electrical Code 1	2.00
CNEL 2300	Electrical Rotating Machinery	2.00
CNEL 2400	Feeder and Service Installation	2.00
CNEL 2450	Advanced Motor Controls	3.00
CNEL 2500	N.E.C. Calculations	2.00
CNEL 2550	National Electrical Code 2	2.00
CNEL 2600	Commercial Wiring	3.00
CNEL 2650	Programmable Controls	2.00
CNEL 2700	Trade and Industry Relations.	1.00
CNEL 2750	Digital Electronic Circuits	1.00
HVAC 1250	Interpreting Schematic Drawings	2.00
HVAC 1300	HVAC and R Controls	2.00
HVAC 2640	Introduction to Solar Energy	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (9 credits)

To complete the Construction Electricity Diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Criminal Justice Studies

- Criminal Justice A.S. degree—60 credits

What You Will Learn

MCTC's Criminal Justice Studies program will equip you to understand the causes of and means to prevent crime and to work effectively in the criminal justice field as a law enforcement officer, correctional officer, or in the courts or probation fields.

Your coursework will give you a broad professional education in the criminal justice system, including the workings of the police, courts and corrections departments and an understanding of how they work together. As a foundation for your studies, you will take liberal arts classes in related subjects such as psychology and sociology. Program courses will cover drugs in the community, juvenile justice, family violence, intercultural communications, the relationship between police officers and their communities, and more.

By completing the A.S. degree in Criminal Justice Studies, you can easily transition to MCTC's Law Enforcement Certificate program to prepare yourself to take the state peace officer license examination. You must be a U.S. citizen to be licensed as a police officer in the state of Minnesota. There is a separate application process to enroll in the Law Enforcement Certificate Program. Call 651-999-7600 for details. To become a corrections officer or a police officer, you will be required to successfully pass extensive criminal background checks.

A four-year degree is needed for some criminal justice positions. MCTC has an articulation agreement with Metropolitan State University.

Where You Could Work

- Correctional institutions
- Criminal courts
- Community corrections departments
- Nonprofit court diversion programs

Students are accepted into this program for fall, spring and summer terms.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing assessment test scores.

Criminal Justice Studies A.S. Degree

Credits: 60

Course #	Course Name	Credits
COUN 1500	Drugs in the Community	3.00
ENGL 1110	College English 1	3.00
ENGL 1111	College English 2	3.00
PHIL 1171	Ethics	3.00
LAW 1215	Police and Community	3.00
LAW 1220	Juvenile Justice	3.00
LAW 1250	Introduction to Corrections.	3.00
PSCI 2000	Constitutional Law.	3.00
PSYC 1100	Applying Psychology	3.00
OR		
PSYC 1110	General Psychology.	4.00
SOCI 1105	Introduction to Sociology	3.00
SOCI 2115	Family Violence	3.00
SOCI 2145	American Minority Relations.	3.00
SOCI 2155	Introduction to Criminal Justice	3.00
SPCH 1010	Interpersonal Communication	3.00
SPCH 1012	Intercultural Communication	3.00
General Education Courses (see below)		6.00
Elective Courses (see below)		9.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (6 credits)

To complete the Criminal Justice Studies A.S. degree, students are required to successfully complete six additional general education credits outside the program requirements listed above.

Elective Courses (9 credits)

To complete the Criminal Justice Studies A.S. degree, students are required to successfully complete nine credits of elective coursework. These nine credits can be selected from any of the courses listed below.

Elective Courses

Course #	Course Name	Credits
ACES 1132	Ethnic America	3.00
ANTH 1105	Introduction to Cultural Anthropology	3.00
CHEM 1145	Forensic Science 1	3.00
CSCI 1100	Introduction to Computers	3.00
HLSC 1000	Introduction to Homeland Security	3.00
HLTH 2249	First Responder.	3.00
WOST 2211	Women and Violence: The Humanities Respond.	3.00
PHED 1180	Fitness Intensity	1.00
SOCI 1106	Sociology of Deviance.	3.00
PSCI 1102	State and Local Government	3.00
PSYC 2250	Abnormal Psychology	3.00
PSYC 2260	Social Psychology	3.00

Culinary Arts

- Culinary Arts A.A.S. Degree—60 credits
- Culinary Arts Diploma: fall start—54 credits
- Culinary Arts Diploma: spring start—54 credits
- Culinary Arts Certificate—13 credits
- Baking Certificate—16 credits
- Restaurant Management A.A.S. Degree—60 credits (See page 143)
- Restaurant Management Diploma—27 credits (See page 143)

What You Will Learn

MCTC's Culinary Arts Program prepares you in all facets of food preparation and presentation and helps you to develop your own creative culinary style.

You will receive instruction on basic to advanced cooking skills including meat, fish and poultry fabrication; garde manger (cold food preparation); charcuterie (sausage, paté and terrine preparation); baking; pastry art; and more. Coursework also covers tableside cooking, menu design, restaurant operations, management principles, nutrition, safety and sanitation.

You will receive extensive hands-on training in MCTC's cooking labs and in the student-operated dining room which is open to the public. You also have the opportunity to participate in numerous community service events wherein you can apply your banquet, buffet, and catering culinary knowledge and techniques.

To successfully participate in the program, you must be able to lift 25 pounds, have the endurance to stand for several hours at a time and have good eye-hand coordination. All students must purchase uniforms, knife and baking kits, and textbooks, as well as cover field trip costs.

MCTC has an articulation agreement with Metropolitan State University that permits transfer of the A.A.S. in Culinary Arts to their B.A.S. in Hospitality Management program.

Where You Could Work

- Restaurants
- Hotels
- Resorts
- Cruise ships
- Hospital and healthcare centers
- Institutions and companies with food service

Students are accepted into this program both fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 200 or ESOL 0052 or completion of READ 100 or ESOL 0042 with faculty recommendation into ESOL 0052, placement into ENGL 0900.
- **Math:** Placement into MATH 0070 or MATH 0077 or completion of MATH 0060.

Culinary Arts A.A.S. Degree

Credits: 60

Required Program Courses

Course #	Course Name	Credits
CULA 1005	Culinary Fundamentals.	5.00
CULA 1106	Introduction to Baking	3.00
CULA 1109	ServSafe Sanitation	2.00
CULA 1110	Food Service Nutrition	3.00
SPCH 1012	Intercultural Communication.	3.00
CULA 1120	Casual Restaurant Operations.	5.00
CULA 1125	International Cuisine	3.00
CULA 1115	Hospitality Management.	3.00
CULA 1105	Food Service Purchasing and Receiving	2.00
CULA 2103	Advanced Pastry Arts.	3.00
CULA 2504	Event Planning	3.00
CULA 2510	Full Service Restaurant Operations.	5.00
CULA 2502	Garde Manger	3.00
CULA 2505	Menu Planning	2.00
CULA 2500	Beverage Management	3.00
ECON 2000	Principles of Macroeconomics	3.00
General Education Courses.		9.00

General Education Coursework (9 credits)

To complete the Culinary Arts A.A.S. degree, students are required to successfully complete nine credits of general education coursework.

Culinary Arts Diploma

Credits: 54

Course #	Course Name	Credits
CULA 1005	Culinary Fundamentals.	5.00
CULA 1106	Introduction to Baking	3.00
CULA 1109	ServSafe Sanitation	2.00
CULA 1110	Food Service Nutrition	3.00
SPCH 1012	Intercultural Communication.	3.00
CULA 1120	Casual Restaurant Operations.	5.00
CULA 1125	International Cuisine	3.00
CULA 1115	Hospitality Management.	3.00
CULA 1105	Food Service Purchasing and Receiving	2.00
CULA 2103	Advanced Pastry Arts.	3.00
CULA 2504	Event Planning	3.00
CULA 2510	Full Service Restaurant Operations.	5.00
CULA 2502	Garde Manger	3.00
CULA 2505	Menu Planning	2.00
CULA 2500	Beverage Management	3.00
General Education Courses.		6.00

General Education Coursework (6 credits)

To complete the Culinary Arts Diploma, students are required to successfully complete six credits of general education coursework.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Culinary Arts Certificate

Credits: 13

Course #	Course Name	Credits
CULA 1005	Culinary Fundamentals	5.00
CULA 1106	Introduction to Baking	3.00
CULA 1109	ServSafe Sanitation	2.00
CULA 1110	Food Service Nutrition	3.00

Culinary Certificate in Baking

Credits: 16

Course #	Course Name	Credits
CULA 2000	Artisan Baking	3.00
CULA 1106	Introduction to Baking	3.00
CULA 1109	ServSafe Sanitation	2.00
CULA 1110	Food Service Nutrition	3.00
CULA 1105	Food Service Purchasing and Receiving .	2.00
CULA 2103	Advanced Pastry Arts.	3.00

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.
- **Math:** Placement into MATH 0070 or MATH 0080 or completion of MATH 0070 or MATH 0077.

Dental Assistant

The Dental Assistant program is accredited by the Commission on Dental Accreditation of the American Dental Association, (211 E. Chicago Ave.; Chicago, IL 60611; 1-312-440-4653), and approved by the Minnesota State Board of Dentistry (University Park Plaza; 2829 University Ave. SE, Suite 450; Minneapolis, MN 55414; 1-612-617-2250).

- Dental Assistant Diploma—39 credits
- Dental Office Support Personnel Certificate—17 credits
- Expanded Functions Certificate—16 credits

What You Will Learn

MCTC's Dental Assistant Diploma program is a one-year evening program for individuals employed in a dental office who wish to become certified and/or licensed dental assistants.

As part of a dental team, the dental assistant is an important communication link between the dentist and patient. You will need to interact with a wide variety of patients under sometimes stressful situations. The program will increase your knowledge to work chair-side with the dentist and his or her patients, perform a variety of patient care functions, provide assistance within the business office, and/or complete laboratory duties.

To enter the evening program, you must have a minimum of one year of dental office experience and be presently employed in a dental office or have completed the Dental Office Support certificate program. Your coursework will include basic and dental sciences, dental materials, chairside assisting, Radiology, Minnesota expanded functions, and clinical experience. The goal is to ensure you will be an indispensable member of the dental health team.

The program's classroom, preclinical and clinical experiences will prepare you to take the Certification Examination offered by the Dental Assisting National Board (DANB), the Licensure and Jurisprudence Examinations offered by the Minnesota Board of Dentistry.

Where You Could Work

- Public and/or private dental offices
- Single or multiple-provider dental clinics
- General or specialty dental offices
- Dental laboratory
- Dental insurance companies
- Dental supply companies

How You Apply

To apply to the Dental Assistant Diploma evening program or the Expanded Functions Certificate Program, students must submit MCTC General Application and Dental Assistant Program documents. Students must contact the dental assistant program director at 612-659-6071 to obtain the required Dental Assistant Program documents to verify employment.

Students are accepted into the Dental Support Personnel certificate program each semester. **(Please note: not all courses are offered each semester.)** Students are accepted into the Dental Assistant evening diploma program fall semester only. Students are accepted into the Expanded Functions Dental Assistant certificate program spring semester only.

The Dental Programs require that:

- **Reading:** To enroll in program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052 on the basis of their reading placement test scores.
- Students achieve grades of "C" (2.0) or above in all DNTA theory courses and combined theory/lab courses, and
- Students achieve Pass (P) grades in lab and clinical/externship courses.

Important information when considering application to the Dental Assistant Program

The curriculum in the dental assistant program may expose students to hazardous materials, radiation and/or infectious diseases. Students will be provided with information through education and program policies to protect themselves and their patients from harm. Students will be expected to utilize appropriate safety precautions in the classroom, laboratory and clinic. Program policies are available upon request to the program director (612-659-6071).

Students considering entering this field should be aware that individuals with oral and/or facial piercing cannot wear oral or facial jewelry or studs when participating in on-campus lab activities and externships. When performing procedures on peers in the dental lab, oral and facial jewelry or studs increases the potential for injury and many of the affiliating dental clinics do not permit wearing of oral and facial jewelry or studs while working in the facility as an extern. MCTC is not able to guarantee placement in clinics that will permit wearing of oral and/or facial jewelry or studs and you should be aware that two satisfactorily completed clinical externships are required to graduate with a Dental Assistant Diploma.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Also, some affiliating clinics require that students pass a **criminal background check** prior to being assigned in their clinic as an extern. Again, MCTC is not able to guarantee placement of students who do not pass the criminal background check and you should be aware that two satisfactorily completed clinical externships are required to graduate with a Dental Assistant Diploma.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Dental Assistant Diploma

Credits: 39

For the evening diploma program (students employed in a dental clinic) the following course sequence is required by the employed evening students to complete the program. First semester courses are only offered during the fall semester, second semester courses are only offered during the spring semester and third semester courses are only offered during the summer semester.

First Semester

Course #	Course Name	Credits
DNTA 1101	Introduction to Dental Assisting	3.00
DNTA 1110	Dental Science	3.00
DNTA 1120	Preclinical Dental Assisting	1.00
DNTA 1130	Chairside Dental Assisting 1	3.00
DNTA 1140	Chairside Dental Assisting 2	2.00
DNTA 1170	Clinical Externship 1	3.00

Second Semester

Course #	Course Name	Credits
DNTA 1210	Dental Materials	3.00
DNTA 1250	Radiology 1	3.00
DNTA 1260	Dental Assistant Expanded Functions 1	4.00
DNTA 1274	Clinical Externship 2	4.00
General Education Courses (see below)		3.00

Third Semester

Course #	Course Name	Credits
DNTA 1350	Radiology 2	3.00
DNTA 1360	Dental Assistant Expanded Functions 2	4.00

General Education Courses (3 credits)

To complete the Dental Assistant Diploma, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1. SPCH 1010 or SPCH 1012 is recommended.

Dental Office Support Personnel Certificate

Credits: 17

The Dental Office Support Personnel Certificate is a one-semester program that will prepare you to work in dental offices and clinics providing support to other credentialed dental personnel and/or office staff. This program provides an entry level education that prepares you to safely work within a dental setting. You will support the general office routines with skills in computerized scheduling and basic customer service. You will also be introduced to common dental terms, equipment and health/safety issues, as well as learn skills to support dental office personnel. Upon completion of the certificate, you will be prepared to work in a dental office in a supportive role and/or ladder into the MCTC Dental Assisting diploma courses.

Course #	Course Name	Credits
HCCC 1010	Behaviors for Success in Healthcare	0.50
HCCC 1020	Communication in Healthcare	1.00
HCCC 1030	Awareness and Sensitivity to Client Needs	0.50
HCCC 1040	Respecting Client and Staff Diversity	0.50
HCCC 1050	Healthcare Safety and Standard Precautions	0.50
HCCC 1060	Legal Issues in Healthcare	0.50
HCCC 1070	Healthcare Ethics	0.50
HCCC 1100	Medical Terminology	1.00
DNTA 1000	Introduction to the Dental Office	2.00
DNTA 1015	Customer Service Skills for the Dental Office	3.00
DNTA 1025	Clinic Support for the Dental Office	2.00
DNTA 1035	Dental Office Support Skills Lab	2.00
*SPCH 1010	Speech Course	3.00
OR		
*SPCH 1012	Speech Course	3.00

*Take one of the following: SPCH 1010 **OR** SPCH 1012.

The courses students transitioning to the dental assistant diploma program will take are offered during the day. The sequence of courses will differ from the evening course offerings.

Dental Assistant Expanded Functions Certificate

Credits: 16

The Expanded Functions Dental Assistant certificate program is an evening program designed for the employed dental assistant who is currently certified through DANB or has completed an ADA accredited program that did not offer the Minnesota expanded functions. After completing this certificate and passing the Minnesota Licensure Examination, you will be able to provide direct patient care in general or specialty dental offices.

The following course sequence is required for completion of this certificate. First semester is only offered during the spring semester and second semester is only offered during the summer semester. Students must contact the Dental Assistant program director at 612-659-6071 for advising.

First Semester

Course #	Course Name	Credits
DNTA 1201	Introduction to Expanded Functions . . .	2.00
DNTA 1250	Radiology 1	3.00
DNTA 1260	Dental Assistant Expanded Functions 1 .	4.00

Second Semester

Course #	Course Name	Credits
DNTA 1350	Radiology 2	3.00
DNTA 1360	Dental Assistant Expanded Functions 2 .	4.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Education

- Education A.S. Degree—60 credits
- ESOL Education Certificate—13 credits
- Special Education Certificate—24 credits

What You Will Learn

MCTC's Education program will introduce students to the special challenges and opportunities of urban teaching and prepare students to transfer and obtain a four-year bachelor of arts degree in education.

The program—the only two-year pre-professional urban teacher program in Minneapolis—offers a curriculum that examines knowledge, engages in reflection and values diverse urban experiences. During the program, students will learn to practice and model advocacy and activism by coaching young people and participating in cohort and cooperative learning projects. (In a cohort, groups of students move through their coursework together in a connected, supportive and intimate learning environment.)

Instructors with urban teaching experience will teach you how to examine personal socialization, understand and value different ethnic cultures, conduct and document community-based research, prepare an urban school research profile, and develop the teaching skills needed in a complex and diverse urban school environment. Students will also develop, through involvement in the Public Achievement programs, the democratic skills and attitudes necessary to effect positive change in urban school settings.

Employment in this field will require you to **pass a background check**, as employers will not hire anyone with a felony record.

MCTC works in partnership with urban communities and urban schools. As a result, these studies go beyond the classroom, allowing students to work with urban learners in the elementary and secondary schools. In addition, by the end of the program, students will have created an electronic portfolio highlighting their achievements in the program. MCTC's Education program has articulation agreements with other four-year colleges and universities (many of them local); however, because of a special relationship with our partners at Metropolitan State University, students have the opportunity to earn both an A.S. and B.S. degrees (as well as their teaching license) at the MCTC-Metropolitan State University Downtown campus. MCTC also has a similar relationship with Minnesota State University Moorhead with an emphasis in special education; students have the opportunity to earn both A.S. and B.S. degrees at the MCTC downtown location.

Where You Could Work

- Public school system
- Private/charter school systems

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or MATH 0077 or be declared ready to enroll in MATH 0080.

Education A.S. Degree

Credits: 60

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1215	Growth and Development of Children and Youth	3.00
ENGL 1110	College English 1.	3.00
EDUC 1235	Guiding Behaviors of Children and Youth	3.00
EDUC 1150	Mentoring the Urban Youth.	2.00
EDUC 1500	Introduction to Urban Education and Urban Learners.	3.00
PSYC 2215	Child and Adolescent Psychology	3.00
MATH 1165	Math for Teachers	4.00
SPCH 1012	Intercultural Communications.	3.00
AMIS 1000	Native America	3.00
SOCI 1110	Families in a Contemporary Society.	3.00
EDUC 1900	Public Work in Urban Schools	3.00
EDUC 2600	Field Experience	3.00
BIOL 1136	Environmental Science	3.00
BIOL 1137	Environmental Science Lab.	1.00
EDUC 2250	Introduction to Special Education	3.00
PHIL 1171	Ethics	3.00
OR		
PHIL 1181	Ethics in Community	3.00
EDUC 2900	Teachers' Experience in Urban Schools	3.00
EDUC 1170	Tutoring in K–12 Environments.	3.00
ENGL 1111	College English 2.	3.00
	General Education MnTC.	4.00

General Education Coursework (30 credits)

To complete the Education A.S. degree, students are required to successfully complete 30 credits of general education coursework. The coursework above satisfies that requirement.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

ESOL Education Certificate

Credits: 13

Course #	Course Name	Credits
EDUC 2200	Introduction to Language and Language Teaching for ESOL Educators .	3.00
EDUC 2300	Introduction to English for ESOL Educators	3.00
EDUC 2400	Methods and Materials for ESOL Educators	4.00
General Education MnTC Goal Area 1.		3.00

Special Education Certificate

Credits: 24

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 1300 or completion of READ 0200 or ESOL 0052.
- **Math:** Placement into MATH 0080 or completion of MATH 0070 or 0077.
- **Writing:** Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

First Semester

Course #	Course Name	Credits
EDUC 1000	Introduction to Careers with Children and Youth	1.00
EDUC 1170	Tutoring the Urban Student	3.00
EDUC 1215	Child, Youth Growth and Development	3.00
EDUC 1235	Guidance Strategies for Children and Youth	3.00
ENGL 1110	College English	3.00

Second Semester

Course #	Course Name	Credits
EDUC 2250	Introduction to Special Education	3.00
EDUC 2260	Instruction for Exceptional Learners . . .	3.00
EDUC 2270	Learning Disabilities and Behavior Disorders	3.00
EDUC 2280	Communication and Collaboration in Diverse Settings.	2.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Electroneurodiagnostic Technology

The Electroneurodiagnostic Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, FL 33756, 1-727-210-2350.

- Electroneurodiagnostic Technology A.A.S. Degree—70 credits
- Electroneurodiagnostic Technology Diploma—56 credits

What You Will Learn

MCTC's new Electroneurodiagnostic (END) Technology program provides you with the skills needed to work with a variety of equipment to perform diagnostic neurological studies and tests. After one year of coursework is completed, you will receive your diploma and can work in this field. After completion of the two-year degree, you will be qualified for more complex responsibilities in the work environment.

You will learn the skills needed to perform quality electroencephalograms, evoked potentials, nerve conduction velocities, and intraoperative monitoring in hospitals and neurology clinics.

This occupation is evolving in the field of healthcare. END Technology graduates work in hospitals and neurology clinics around the country.

Knowledge of seizure disorders, neurological disorders and operating room skills is the basis of the field study. END technologists work with a variety of equipment to perform diagnostic neurological studies.

Because this program requires internships in hospital settings, you must pass a background check and provide proof of immunity status prior to placement in the healthcare setting.

Where You Could Work

- Neurology departments in hospitals
- Neurology clinics

The ENDT Program requires:

- Grades of "C" (2.0) or above in all ENDT courses and all program-required general education courses;
- Pass (P) grades in lab and clinical internship courses; and
- **Passing a criminal background check prior to being placed in an ENDT internship.** The college cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651- 297-7014.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or MATCH 0077 or be declared ready to enroll in MATH 0080 on the basis of their math placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their placement writing test scores.

Electroneurodiagnostic Diploma or A.A.S. Degree

Credits: Diploma 56, A.A.S. Degree 70

First Semester

Course #	Course Name	Credits
ENDT 1010	Foundations of ENDT.	6.00
ENDT 1030	Introduction to ENDT.	3.00
BIOL 1127	Human Biology.	3.00
BIOL 1128	Human Biology Lab.	1.00
COML 1100	Computer Literacy.	2.00
HCCC 1100	Medical Terminology.	1.00

Second Semester:

Course #	Course Name	Credits
ENDT 1510	Principles of ENDT Equipment.	6.00
ENDT 1525	Clinical Correlates 1.	2.00
ENDT 1100	Clinical Neurology for the ENDT Role.	4.00
ENGL 1110	College English.	3.00

Summer Session:

Course #	Course Name	Credits
ENDT 1850	Clinical Internship 1.	4.00
PSYC 1110	General Psychology.	4.00

Third Semester:

Course #	Course Name	Credits
ENDT 2050	Clinical Internship 2.	8.00
ENDT 2010	Evoked Potentials.	3.00
ENDT 2030	Nerve Conduction Studies.	3.00
SPCH 1012	Intercultural Communication.	3.00
Total Diploma Program Credits: 56		

At this point in the ENDT Program, a diploma can be earned, and students can continue on to the complete A.A.S. degree.

Fourth Semester:

Course #	Course Name	Credits
ENDT 2525	Clinical Correlates 2.	2.00
ENDT 2550	Clinical Internship 3.	8.00
PSYC 2240	Lifespan Development.	4.00
Total AAS Degree Program Credits: 70		

General Education Coursework (18 credits)

To complete the Electroneurodiagnostic Technology A.A.S. Degree, students are required to successfully complete 18 credits of general education coursework. The required coursework is included in the course outline.

General Education Coursework (14 credits)

To complete the Electroneurodiagnostic Technology Diploma, students are required to successfully complete 14 credits of general education coursework. The required coursework is included in the course outline.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Global Studies

- Global Studies Certificate—18 credits

What You Will Learn

The MCTC Global Studies certificate is designed to prepare you with the knowledge and skills necessary to participate effectively in the global workplace and as world citizens who can meet the challenges of an increasingly interdependent global community. You will learn, through a multidisciplinary approach, to see and better understand how people and nations of the world are interconnected with each other and with the natural environment of our planet Earth. By taking a variety of courses with a common focus, you will develop habits of thinking and questioning that will enable you to address complex global political, economic, cultural and environmental issues from diverse perspectives. You will also gain the knowledge and skills to communicate and work collaboratively across borders, with people from a variety of backgrounds and cultures, and the ability to contribute to the creation of a more equitable, sustainable and peaceful world.

The main objective of a Global Studies certificate is to offer educational opportunities for you to become productive, global citizens and future leaders in the community, state, nation and world. This certificate complements many academic fields and any career that benefits from a global perspective. The program helps prepare you for transfer into four-year degree programs that focus on global studies; ethnic, area or environmental studies; international business; international affairs; and development work or other career fields, such as healthcare and law enforcement, that will require you to deal with diverse people and groups.

Where You Could Work

- Environment and health resources centers
- Social service centers
- Advocacy groups
- Cultural resources organization

Global Studies Certificate

Credits: 18

Required Courses

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
ENGL 1110	College English 1	3.00
OR		
SPCH 1012	Intercultural Communication	3.00
ACES 1500	Introduction to Global Studies	3.00
ACES 2105	Globalization and Culture Change.	3.00
BIOL 1136	Environmental Science.	3.00
OR		
WOST 2212	Ecofeminism	3.00
OR		
PHIL 2171	Environmental Ethics.	3.00
PSCI 1104	World Politics.	3.00
OR		
ACES 1190	World Religions	3.00
OR		
HIST 1010	World History 2	4.00
OR		
HIST 1020	Contemporary World History: Issues and Themes	3.00
OR		
ENGL 2225	World Literature: Asia and Middle East. .3.00	
OR		
ENGL 2226	World Literature: Europe, Africa and Latin America	3.00
OR		
BUSN 2270	Introduction to International Business . .3.00	

Graphic Design: Print Media

- Graphic Design: Print Media A.A.S. Degree—66 credits
- Graphic Design: Print Media Certificate—30 credits
- Graphic Design Core Certificate—18 credits

What You Will Learn

MCTC's Graphic Design program will teach you how to visually communicate important messages and electronically prepare your work for printed reproduction of catalogs, brochures, book jackets, advertisements, packaging, point-of-purchase displays and more.

The program's core set of classes will allow you to specialize in graphic design, or migrate to the Web and Interactive Media program. In addition, MCTC offers specialized courses to accommodate both degree-seeking students and industry professionals.

Your coursework will cover visual problem-solving, art and design principles, and print production standards, using computer and current design software to create visual solutions for your final projects.

Experienced faculty will teach you how visual elements such as type, graphics, illustration and photography work together to make a design more effective. To simulate a professional creative environment, you will work under tight deadlines to design, lay out and produce a variety of printed pieces. Students' finished projects will create a well-rounded portfolio necessary for entry into the design profession.

Program faculty will help you prepare your portfolio and give you guidelines on job seeking. Students are required to exhibit their work in the program portfolio show. Faculty have developed numerous award-winning partnerships within the industry and community, and students benefit in numerous ways from these alliances.

To successfully complete the program and work in this profession, you will need to own, or have access to, a computer and current design software. You also will need to purchase a large-format portable storage device.

MCTC has an articulation agreement with Metropolitan State University.

Where You Could Work

- Advertising agencies
- Art studios
- Corporate art departments
- Government institutions
- Graphic design firms
- Marketing and public relations firms
- Government and education institutions

- Printing and publishing firms
- Retail and merchandising companies

Students are accepted into this program for fall, spring and summer terms.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of your math placement test scores.

Graphic Design: Print Media A.A.S. Degree

Credits: 66

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
ARTS 1121	Drawing 1	3.00
GRPH 1101	Typography 1	3.00
GRPH 1120	Layout and Design 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00
GRPH 1540	History of Graphic Design	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
GRPH 1520	Layout and Design 2	3.00
GRPH 1560	Print Production 1	3.00
GRPH 1570	Adobe Illustrator	3.00
GRPH 1585	Adobe InDesign	3.00
GRPH 2101	Typography 2	3.00
GRPH 2110	Adobe Photoshop	3.00
GRPH 2130	Graphic Design Problems 1	3.00
GRPH 2530	Graphic Design Problems 2	3.00
GRPH 2540	Career Planning/Professional Practices	3.00
GRPH 2550	Portfolio Prep/Exhibit	3.00
General Education Courses (see below)		15.00
Elective Courses (see below)		3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

General Education Courses (18 credits)

To complete the Print Media A.A.S., students are required to successfully complete 18 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 Speech Communication courses as well as three credits from Goal Area 1 English courses; three credits from any Goal Area 5 Psychology course; three credits from any Goal Area 6 Arts courses; and three additional credits from any Goal Area 6 Arts course that also holds MnTC 8, or CIST 1106. In addition, ARTS 1121 is also required.

Elective Courses

Course #	Course Name	Credits
GRPH 2145	Graphic Design Internship	2.00

OR

Any GRPH, WEB1, PHDI or MPRO courses, with instructor approval.

Graphic Design Core Certificate

Credits: 18

Course #	Course Name	Credits
GRPH 1101	Typography 1	3.00
GRPH 1120	Layout and Design 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00
GRPH 1540	History of Graphic Design	3.00

In addition, students must select any three-credit Speech Communication course from MnTC 1.

Graphic Design: Print Media Certificate

Credits: 30

First Semester

Course #	Course Name	Credits
GRPH 1101	Typography 1	3.00
GRPH 1120	Layout and Design 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00

In addition, students must select any three-credit Speech Communication course from MnTC 1.

Second Semester

Course #	Course Name	Credits
GRPH 1520	Layout and Design 2	3.00
GRPH 1540	History of Graphic Design	3.00
GRPH 1560	Print Production 1	3.00
GRPH 1585	Adobe InDesign	3.00
GRPH 2110	Adobe Photoshop	3.00

Graphic Design: Web and Interactive Media

- Web and Interactive Media A.A.S. Degree—66 credits
- Web and Interactive Media Certificate—30 credits
- Web and Interactive Media Core Certificate—18 credits

What You Will Learn

MCTC's Web and Interactive Media and Web Design program will prepare you to use a variety of specialized computer software to create, prepare and produce printed or interactive Web design productions.

The program's core set of classes will allow you to specialize in Web design or electronic publishing, or migrate to the Graphic Design program. The Web and Interactive Media certificate or diploma coursework will concentrate on current industry standard programs and prepress skills needed to successfully guide a job from concept to print.

The Web and Interactive Media certificate, diploma and A.A.S. degrees feature current Web design studies in the Internet technologies and design profession. In addition, the program offers specialized courses to accommodate both degree-seeking students and current industry professionals.

Overall, coursework will cover visual problem-solving, art and design principles, and Web or electronic production standards, using the computer and current software standards extensively to prepare creative visual solutions for student projects.

Experienced faculty will teach you how visual elements such as type, illustration, graphics, photography and animation work together to make a design more effective. To simulate a professional creative environment, you will work under tight deadlines to design, compose and produce work using current software. Your finished projects will create a well-rounded portfolio necessary for entry into the design profession.

Program faculty will help you prepare your portfolio and give you guidelines on job seeking. Students are required to exhibit their work in the program portfolio show. Faculty have developed numerous award-winning partnerships within the industry and community, and students benefit in numerous ways from these alliances.

To successfully complete the program and work in this profession, you will need to own, or have access to, a computer and current design software.

You also will need to purchase a large-format portable storage device.

MCTC has an articulation agreement with Metropolitan State University.

Where You Could Work

- Advertising agencies
- Animation companies and studios
- Corporate creative departments
- Electronic publishing departments
- Freelance businesses
- Government and education institutions
- Graphic design firms
- Marketing firms
- Public relations firms
- Web design studios

Students are accepted into this program for fall, spring and summer terms.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Web and Interactive Media A.A.S. Degree

Credits: 66

(Listed below are additional courses required for completion of this program.)

First Semester

Course #	Course Name	Credits
SPCH	Any Speech course from MnTC 1	3.00
WEBI 1611	HTML/XHTML Authoring 1	3.00
GRPH 1101	Typography 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00
WEBI 1416	Web Layout and Design	3.00

Second Semester

Course #	Course Name	Credits
WEBI 1711	Web Tools: Dreamweaver	3.00
WEBI 1911	Scripting Overview	3.00
ARTS 1121	Drawing 1	3.00
GRPH 2110	Adobe Photoshop	3.00
GRPH 1540	History of Graphic Design	3.00
WEBI 1811	Web Animation: Flash/Image Ready	3.00

Third Semester

Course #	Course Name	Credits
PSYC	Any Psychology course from MnTC 5	3.00
WEBI 2023	Web Layout and Design 2	3.00
WEBI 2012	Scripting Overview 2	3.00
ARTS	Any Arts course from MnTC 6	3.00
	Any elective course from GRPH, WEBI or PHDI	3.00

Fourth Semester

Course #	Course Name	Credits
GRPH 2540	Career Planning/Professional Practices	3.00
GRPH 2550	Portfolio Prep/Exhibit	3.00
WEBI 2116	Type in Motion	3.00
ENGL	Any English course from MnTC 1	3.00
ARTS	Any Arts course from MnTC 8	3.00
OR		
CIST 1106	History of Photography	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (18 credits)

To complete the Web and Interactive Media A.A.S. degree, students are required to successfully complete 18 credits of general education coursework. The coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 Speech Communication courses as well as three credits from Goal Area 1 English courses; three credits from any Goal Area 5 Psychology course; three credits from any Goal Area 6 Arts courses; and three additional credits from any Goal Area 6 Arts course that also holds MnTC 8, or CIST 1106.

Web and Interactive Media Core Certificate

Credits: 18

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
SPCH	Any Speech course from MnTC 1	3.00
WEBI 1611	HTML Authoring 1	3.00
GRPH 1101	Typography 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00
WEBI 1416	Web Layout and Design	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Web and Interactive Media Core Certificate, students are required to successfully complete any SPCH course from MnTC Goal Area 1.

Web and Interactive Media Certificate

Credits: 30

Course #	Course Name	Credits
WEBI 1416	Web Layout and Design	3.00
WEBI 1611	HTML/XHTML Authoring 1	3.00
WEBI 1711	Web Tools: Dreamweaver	3.00
WEBI 1911	Scripting Overview	3.00
WEBI 1811	Web Animation: Flash	3.00
GRPH 1101	Typography 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
GRPH 1140	Color Theory	3.00
GRPH 2110	Adobe Photoshop	3.00
	General Education Courses (see below)	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Web and Interactive Media Certificate, students are required to successfully complete any SPCH course from MnTC Goal Area 1.

Healthcare Core Curriculum

- Healthcare Core Curriculum

What You Will Learn

Healthcare careers are varied and many. When pursuing health-related occupations, you will perform specific functions according to a chosen career. The Healthcare Core Curriculum is the Minnesota State Colleges and Universities (MnSCU)-approved standardized curriculum. It serves as a pathway for health education, assisting you to explore areas of career interest and develop an awareness of workplace expectations. Possible areas may include direct client care, community health worker, blood drawing, central services technician and dental office support personnel.

The Healthcare Core Curriculum provides knowledge that is applicable for employment in a wide range of health care and human service settings. Eight modules provide you with the skills and principles necessary for entry-level positions in health care. Coursework includes:

- An overview of career opportunities available
- Roles of healthcare workers
- Licensure or credentialing requirements
- Behaviors suitable for the workplace
- Employer expectations
- Effective communication skills
- Respect for the diversity of staff and clients
- Awareness of client needs
- Legal and ethical implications in healthcare settings
- Safety issues in the workplace
- Medical terminology

In addition, you will learn a model for effective problem-solving that may be applied to workplace-related issues.

Since it is vital to maintain high health care standards in all health-related facilities, you will need to pass a background check requirement and meet specific health requirements as you progress within the curriculum.

Where You Could Work

The Healthcare Core Curriculum is intended as a pathway in healthcare-related education. After completion of the Healthcare Core Curriculum, you will apply the skills and knowledge learned to a specific program of interest in healthcare.

- Nursing assistant
- Phlebotomist
- Medical secretary
- Medical coder
- Nursing
- Dental office support personnel
- Community health worker
- Central services technician

How You Apply

You may register for the Healthcare Core Curriculum after applying to the College and completing assessment testing. Students must place into READ 0200 or ESOL 0052 or equivalent; ENGL 0900 or ESOL 0051.

Healthcare Core Curriculum

Course #	Course Name	Credits
HCCC 1000	Health Career Exploration	0.00
HCCC 1010	Behaviors for Success in Health Careers .	0.50
HCCC 1020	Communication in Healthcare	1.00
HCCC 1030	Awareness and Sensitivity to Client Needs.	0.50
HCCC 1040	Respecting Client and Staff Diversity . .	0.50
HCCC 1050	Healthcare Safety and Standard Precautions	0.50
HCCC 1060	Legal Issues in Healthcare	0.50
HCCC 1070	Health Care Ethics	0.50

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Heating, Ventilation, Air Conditioning and Refrigeration

- Heating, Ventilation, Air Conditioning and Refrigeration A.A.S. Degree—72 credits
- Heating, Ventilation, Air Conditioning and Refrigeration Diploma—64 credits

What You Will Learn

MCTC's Heating, Ventilation, Air Conditioning and Refrigeration program will train you to diagnose problems, perform repairs and conduct maintenance on residential and commercial heating, ventilation, air conditioning and refrigeration (HVACR) systems.

Through coursework and hands-on laboratory exercises, you will learn Minnesota Energy Code requirements and diagnostic procedures for HVACR equipment. You will be trained to fabricate sheet metal and copper, as well as plastic and steel piping. Experienced instructors will prepare you to work with advanced electrical controls, heat recovery ventilators, air-cleaning devices, sophisticated air-measurement equipment and carbon-monoxide-testing instruments.

You will receive advanced training in indoor-air-quality technologies and commercial and residential heat pumps. Indoor-air-quality training is provided in a specially designed on-site facility.

To participate in the program, you should have a strong mechanical aptitude, strong math skills and enjoy problem-solving. You also must have above-average manual dexterity, be in good physical condition to perform lifting, and be comfortable with heights and climbing ladders. All program participants must purchase approximately \$900 in tools.

During the first year of the program, you will take the same courses as students in the Construction Electricity program, which will give you more electrical training than programs at other technical colleges. This gives you the opportunity to complete both the HVACR and the Construction Electricity programs in just three years.

To schedule a lab tour or discuss the program, call Greg Skudlarek at 612-659-6424.

MCTC has an articulation agreement with Ferris State University.

Where You Could Work

- HVAC residential service companies
- HVACR commercial service companies
- Gas utilities
- Commercial buildings (HVAC maintenance)
- HVACR equipment sales companies

Students are accepted into this program for fall semester only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ESOL 0041 or be declared ready to enroll in ENGL 0900 or ESOL 0051 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Heating, Ventilation, Air Conditioning and Refrigeration A.A.S. Degree

Credits: 72

Introductory Courses

(Listed below are required courses we suggest students choose from during your first semester in this program.)

Course #	Course Name	Credits
CNEL 1000	Introductory Electric Circuits.	2.00
HVAC 1000	Refrigeration Fundamentals.	2.00
HVAC 1050	Trade Tools and Test Instruments.	2.00
HVAC 1100	Metal Fabrication.	3.00
HVAC 2000	Service Procedures for HVACR Technicians.	1.00
HVAC 2650	HVAC Sheet Metal.	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
CNEL 1025	Introduction to Electric Motors.	1.00
CNEL 1050	A.C. Circuit Analysis.	3.00
CNEL 1100	Single Phase Transformer Principles.	1.00
CNEL 1150	Introductory Motor Controls.	2.00
HVAC 1150	Refrigeration Management.	2.00
HVAC 1250	Interpreting Schematic Drawings.	2.00
HVAC 1300	HVAC and R Controls.	2.00
HVAC 2010	HVAC and R Internship 1.	1.00
HVAC 2100	HVAC Design.	2.00
HVAC 2150	Central Air Conditioners.	2.00
HVAC 2200	Commercial Air Conditioners.	3.00
HVAC 2250	Heat Pumps.	2.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

HVAC	2300	Commercial Refrigeration	4.00
HVAC	2350	Commercial Ice Machines	2.00
HVAC	2400	HVAC Rooftop Systems	2.00
HVAC	2450	Indoor Air Quality	2.00
HVAC	2500	Gas-Fired Furnaces	3.00
HVAC	2550	Oil-Fired Furnaces	1.00
HVAC	2600	Residential Boilers	2.00
HVAC	2640	Introduction to Solar Energy	2.00
General Education Courses (see below)			18.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (18 credits)

To complete the Heating, Ventilating, Air Conditioning and Refrigeration A.A.S., students are required to successfully complete 18 credits of general education coursework. This coursework must be selected from at least three of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Heating, Ventilation, Air Conditioning and Refrigeration Diploma

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
CNEL 1000	Introductory Electric Circuits	2.00
CNEL 1025	Introduction to Electric Motors	2.00
HVAC 1000	Refrigeration Fundamentals	2.00
HVAC 1050	Trade Tools and Test Instruments	3.00
HVAC 1150	Refrigerant Management	2.00
General Education Courses (see below)		9.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
CNEL 1050	A.C. Circuit Analysis	3.00
CNEL 1100	Single Phase Transformer Principles	1.00
CNEL 1150	Introductory Motor Controls	2.00
HVAC 1100	Metal Fabrication	3.00
HVAC 1250	Interpreting Schematic Drawings	2.00
HVAC 1300	HVAC and R Controls	2.00
HVAC 2000	Service Procedures for HVACR Technicians	1.00
HVAC 2010	HVAC and R Internship 1	1.00
HVAC 2050	HVAC and R Internship 2	1.00
HVAC 2100	HVAC Design	2.00
HVAC 2150	Central Air Conditioners	2.00
HVAC 2200	Commercial Air Conditioners	3.00
HVAC 2250	Heat Pumps	2.00
HVAC 2300	Commercial Refrigeration	4.00
HVAC 2350	Commercial Ice Machines	2.00

HVAC	2400	HVAC Rooftop Systems	2.00
HVAC	2450	Indoor Air Quality	2.00
HVAC	2500	Gas-Fired Furnaces	3.00
HVAC	2550	Oil-Fired Furnaces	1.00
HVAC	2600	Residential Boilers	2.00
HVAC	2650	HVAC Sheet Metal	3.00
HVAC	2640	Introduction to Solar Energy	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (9 credits)

To complete the Heating, Ventilating, Air Conditioning and Refrigeration Diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Heating, Ventilation, Air Conditioning and Refrigeration Installation Certificate

Credits: 30

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
CNEL 1000	Introductory Electric Circuits	2.00
HVAC 1000	Refrigeration Fundamentals	2.00
HVAC 1050	Trade Tools and Test Instruments	2.00
HVAC 1100	Metal Fabrication	3.00
HVAC 1150	Refrigerant Management	2.00
HVAC 2650	HVAC Sheet Metal	3.00
General Education Courses (see below)		3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
HVAC 2100	HVAC Design	2.00
HVAC 2450	Indoor Air Quality	2.00
HVAC 2700	Residential Blueprint Reading	1.00
HVAC 2750	Mechanical Building Code	2.00
HVAC 2800	Furnace and Central Air Conditioner Installation	2.00
HVAC 2850	Advanced HVAC Sheet Metal	2.00
HVAC 2900	Radiant Floor Systems	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during orientation. You are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the HVAC Installation Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Homeland Security Specialist

- Homeland Security Specialist A.A.S. Degree—60 credits
- Homeland Security Basic Certificate—15 credits
- Homeland Security Emergency Management Certificate—15 credits
- Homeland Security Planning Certificate—15 credits

What You Will Learn

MCTC's Homeland Security Specialist program will prepare you to enter employment in a variety of organizations tasked with responsibility to protect the community from the effects of natural and man-made disasters.

The homeland security and disaster management field is a vibrant and growing industry. As federal and state regulations, including Occupational Safety and Health Administration (OSHA), require more resource allocation to preparation for, and management of, terrorist attacks and man-made or natural disasters, the need for skilled personnel in the field is increasing.

This new and exciting career field is becoming as essential a component to public safety as law enforcement, fire protection services and emergency medical services. In fact, you will find that the concepts and practice of homeland security combine and integrate all the public safety components, as well as public works, public utilities, industry, and many other phases of the community.

The curriculum of the Homeland Security Specialist associate in applied science degree (A.A.S.) is designed to introduce you to the concepts and theory of homeland security and emergency management. You then move to specific skills required to operate in this field, such as responding to hazardous-material and weapons-of-mass-destruction incidents; working in command and control centers; providing crisis management and recovery from disaster; and preparing and executing contingency plans.

In addition to program courses in Homeland Security, by completing the A.A.S. degree you can easily transition to MCTC's Law Enforcement Certificate program to prepare to take the state peace officer license examination. You must be a U.S. citizen, however, to enter the law enforcement profession. To become a corrections officer or police officer, you will be required to successfully pass extensive criminal background checks. Even if you choose not to pursue law enforcement, you will have received a well-rounded criminal justice background.

Where You Could Work

- Federal, state, county, or municipal homeland security or emergency management centers
- Private industrial or commercial organizations
- Private security organizations

Students are accepted into this program for fall, spring, and summer terms.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test score.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Homeland Security Specialist A.A.S. Degree

Credits: 60

First Semester

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
SOCI 1105	Introduction to Sociology	3.00
HLSC 1000	Introduction to Homeland Security	3.00
HLSC 1110	Emergency Management Systems	3.00
Electives		3.00

Second Semester

Course #	Course Name	Credits
ENGL 1111	College English 2	3.00
SOCI 2155	Introduction to Criminal Justice	3.00
HLSC 2200	Terrorism and Emergency Management	3.00
HLSC 2440	Weapons of Mass Destruction	3.00
HLSC 1220	Hazardous Materials Awareness	3.00

Third Semester

Course #	Course Name	Credits
HLSC 1400	Emergency Management Command and Control	3.00
HLTH 2249	First Responder	3.00
HLSC 2550	Homeland Security Practicum	3.00
Electives		6.00

Fourth Semester

Course #	Course Name	Credits
HLSC 2330	Crisis Management, Recovery and Continuity	3.00
PHIL 1171	Ethics	3.00
SOCI 2145	American Minority Relations	3.00
PSYC 1100	Applying Psychology	3.00
OR		
PSYC 1110	General Psychology	3.00
Electives		3.00

General Education Courses (21 credits)

To complete the Homeland Security Specialist A.A.S. degree, students are required to successfully complete 21 credits of general education coursework. The required coursework is included in the course outline above.

Elective Courses (12 credits)

To complete the Homeland Security Specialist A.A.S. Degree, students are required to successfully complete 12 credits of elective coursework. These 12 credits can be selected from any of the courses listed below.

Course #	Course Name	Credits
HLSC 1330	GIS for Homeland Security	3.00
HLSC 2220	Hazardous Risk Assessment	3.00
HLSC 2500	Homeland Security Contingency Planning	3.00
LAW 1215	Police and Community	3.00
LAW 1220	Juvenile Justice	3.00
PSCI 1101	American Government and Politics	3.00
SOCI 2115	Family Violence	3.00

Homeland Security Basic Certificate

Credits: 15

Course #	Course Name	Credits
HLSC 1000	Introduction to Homeland Security	3.00
HLSC 1110	Emergency Management Systems	3.00
HLSC 1220	Hazardous Materials Awareness	3.00
HLSC 2200	Terrorism and Emergency Management	3.00
HLSC 2440	Weapons of Mass Destruction	3.00

Homeland Security Emergency Management Certificate

Credits: 15

Course #	Course Name	Credits
HLSC 1000	Introduction to Homeland Security	3.00
HLSC 1110	Emergency Management Systems	3.00
HLSC 1400	Emergency Management Command and Control	3.00
HLSC 2330	Crisis Management, Recovery and Continuity	3.00
HLSC 2550	Homeland Security Practicum	3.00

Homeland Security Planning Certificate

Credits: 15

Course #	Course Name	Credits
HLSC 1330	GIS for Homeland Security	3.00
HLSC 2220	Hazardous Risk Assessment	3.00
HLSC 2330	Crisis Management, Recovery and Continuity	3.00
HLSC 2440	Weapons of Mass Destruction	3.00
HLSC 2500	Homeland Security Contingency Planning	3.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Human Services

- Human Services A.S. degree—60 credits
- Human Services Diploma—36 credits

What You Will Learn

MCTC's Human Services program will prepare you to work in community settings to assist and advocate for people who face economic, social, emotional, or developmental challenges and barriers.

The program integrates theory and skills practice and emphasizes peer interaction and group learning projects. You will be able to take advantage of a variety of courses that focus on the history of the human services field, social policy, multicultural factors, system change and advocacy.

Throughout the program, you will get to know and work with faculty and other students who want to make a difference in people's lives. Experienced instructors will teach you interviewing, basic case management, and group skills using lecture, role play, and media feedback. A supervised, semester-long community service internship will give you a chance to put your skills to work and gain valuable experience in the field.

Many graduates transfer to bachelor's degree programs. MCTC has an articulation agreement with Metropolitan State University.

Where You Could Work

- Family outreach and advocacy programs
- Residential and community youth service organizations
- Nonprofit and government social service agencies
- School and educational settings
- Group homes
- Community centers
- Culturally focused service agencies
- Housing resource programs

Students are accepted into this program fall and spring semesters only.

The HSER Program requires:

- Grades of "C" (2.0) or above in all HSER program courses; and
- **Passing a criminal background check prior to internship placement.** The College cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.

Courses in this program require achievement of the following program admission requirements:

- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

Summer internships in our program are reserved **only** for students who are completing the 36-credit diploma in Human Services and who have no intention of continuing on for the A.S. degree in Human Services at MCTC. Most students in our program are pursuing the A.S. degree. They must plan for internship during fall or spring semesters. Occasionally, we have a student who intends to complete only a diploma (e.g. already has an associate's or bachelor's degree, or is undergoing a career change). He or she could be eligible for a summer internship.

Human Services A.S. Degree

Credits: 60

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
HSER 1001	Introduction to Human Services and Career Assessment.	4.00
HSER 1002	Multicultural Aspects of Human Services.	2.00
HSER 1105	Promoting System Change	2.00
HSER 1004	Individual Counseling Skills	4.00
General Education Courses (see next page)		9.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
HSER 2001	Introduction to Group Skills	3.00
HSER 2002	Case Management Skills.	4.00
HSER 2003	Internship Assessment and Preparation	1.00
HSER 2004	Internship.	6.00
OR		
HSER 2006	Internship for Community Healthcare Worker.	4.00
HSER 2005	Internship Seminar.	1.00
General Education Courses		21.00
HSER Elective Courses (see next page)		3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (30 credits)

To complete the Human Services A.S., students are required to successfully complete 30 credits of general education coursework. This coursework must be selected from at least six of the MnTC goal areas. A minimum of six credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10, specifically ENGL 1110, ENGL 1111 and SOCI 2115. Students who are not already computer literate should take a computer applications class or an independent study/online tutorial. HSER 2004, HSER 2005 and HSER 2006 may be taken fall and spring terms only.

HSER Elective Courses

Electives may be taken any semester. Choose three credits from the following:

Course #	Course Name	Credits
COUN 1500	Drugs in the Community.	3.00
HSER 1051	Current Issues in Human Services	1.00
HSER 1052	Current Issues in Human Services	2.00
HSER 1110	Working with Youth	2.00
HSER 1111	Using Personality Types in Human Services	2.00
HSER 1115	Self-Care and Wellness for Helping Professionals	2.00

Human Services Diploma

Credits: 36

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
HSER 1001	Introduction to Human Services and Career Assessment.	4.00
HSER 1002	Multicultural Aspects of Human Services	2.00
HSER 1105	Promoting System Change	2.00
HSER 1004	Individual Counseling Skills	4.00
HSER Elective Courses (see below)		3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Course #	Course Name	Credits
HSER 2001	Introduction to Group Skills	3.00
HSER 2002	Case Management Skills.	4.00
HSER 2003	Internship Assessment and Preparation .	1.00
HSER 2004	Internship.	6.00
OR		
HSER 2006	Internship for Community Healthcare Worker.	4.00
HSER 2005	Internship Seminar.	1.00
SOCI 2115	Family Violence	3.00
General Education Courses (see below)		3.00

General Education Courses (6 credits)

To complete the Human Services Diploma, students are required to successfully complete SOCI 2115 and three additional credits from MnTC Goal Area 1.

HSER Elective Courses

Electives may be taken any semester. Choose three credits from the following:

Course #	Course Name	Credits
COUN 1500	Drugs in the Community.	3.00
HSER 1051	Current Issues in Human Services	1.00
HSER 1052	Current Issues in Human Services	2.00
HSER 1110	Working with Youth	2.00
HSER 1111	Using Personality Types in Human Services	2.00
HSER 1115	Self-Care and Wellness for Helping Professionals	2.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Law Enforcement

- Law Enforcement A.S. Degree—64 credits

In conjunction with the opening of a state-of-the-art law enforcement training center at Hennepin Technical College (HTC) in Brooklyn Park, MN, MCTC's professional peace officer education courses, the law enforcement "skills" program, will now be offered through HTC. MCTC students will begin the A.S. degree program on the main MCTC campus and finish the 21 credit skills program on-site at HTC. Please call 651-999-7600 with any questions about law enforcement skills.

What You Will Learn

MCTC's Law Enforcement Program will prepare you to become a professional law enforcement officer who thinks clearly, applies communication and human behavior principles to the job, and effectively uses hands-on skills as the situation requires.

The Law Enforcement training program is accredited by the Minnesota Board of Peace Officer Standards and Training (POST) and provides the academic components of the mandated law enforcement program, with continued training taken on-site at Hennepin Technical College's law enforcement skills facility. The combined learning is varied, including things like the Minnesota statutes and the U.S. Constitution, criminal and traffic law, and training for the many skills used in daily law enforcement, such as:

- Handling and using firearms
- Decision shooting
- Armed and unarmed defensive tactics
- High-speed and pursuit driver techniques
- Low- and high-risk traffic stop tactics
- In-progress crimes and domestic violence tactics
- Criminal investigation and arrest procedures
- Traffic law enforcement and accident investigation

Faculty members include current and past law enforcement officers who will use their broad experience, as well as some of the latest technologies, to give you the best and most practical training possible. For example, decision-shooting exercises use DVD technology with interactive scenarios so you can learn to think and react quickly to life-threatening situations. You also may find yourself confronting typical law enforcement problems in a realistic simulation lab, wherein your actions and techniques are videotaped for later review and analysis.

To enter the program, you will need to possess a valid driver's license, be able to pass a criminal background check, and not be prohibited by state or federal law from possessing a firearm. You also must purchase a uniform, utility belt, and gym wear, and have sufficient strength, flexibility, and cardiovascular endurance to satisfactorily complete the firearms, defensive tactics, and patrol tactics included in the skills portion of the program.

Once you complete the program, you will be eligible to take the state's Peace Officer Licensing Examination required to be eligible for entry-level law enforcement positions with state, county or local government agencies. You must be a U.S. citizen, however, to enter the law enforcement profession.

MCTC has an articulation agreement with Metropolitan State University, should you decide to pursue a four-year degree.

Where You Could Work

- Police departments
- Sheriff's departments
- Department of Natural Resources
- Minnesota State Patrol
- Private security organizations
- Some federal law enforcement agencies

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

Law Enforcement A.S. Degree

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester.)

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
ENGL 1111	College English 2	3.00
HLTH 2249	First Responder	3.00
PHIL 1171	Ethics	3.00
LAW 1215	Police and Community	3.00
LAW 1220	Juvenile Justice	3.00
PHED 1180	Fitness Intensity Training	1.00
LAW 2251	Criminal Justice "Service Learning Internship"	1.00
*PSYC 1100	Applying Psychology	3.00
OR		
*PSYC 2260	Social Psychology	3.00
OR		
*PSYC 1110	General Psychology	4.00
SOCI 1105	Introduction to Sociology	3.00
SOCI 2115	Family Violence	3.00
SOCI 2145	American Minority Relations	3.00
SOCI 2155	Introduction to Criminal Justice	3.00
SPCH 1010	Interpersonal Communication	3.00
	General Education Courses (see next page)	5.00
*Take one of the following: PSYC 1100, PSYC 1110 or PSYC 2260.		

Advanced Courses

(Listed below are additional courses required for completion of this program.)

The final 21 credits are completed at the Hennepin Technical College location of the Law Enforcement training program.

Course #	Course Name	Credits
LAW 2225	Criminal Investigation	3.00
LAW 2230	Legal Issues and Law Enforcement	3.00
LAW 2231	MN Criminal and Traffic Codes	3.00
LAW 2240	Patrol Operations	3.00
LAW 2299	Law Enforcement Integrated Practicum	9.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

To enroll in the Advanced Courses (Professional Licensing program), students must have completed with a minimum "C" grade in each course and an overall 2.50 GPA the following Introductory Courses: ENGL 1110, ENGL 1111, LAWE 1215, LAWE 1220, PSYC 1100, PSYC 1110 or PSYC 2260, SOCI 1105, SOCI 2115, SOCI 2145, and SOCI 2155. To enroll in the Advanced Courses students must also be admitted to the Professional Licensing program at MCTC's Center for Criminal Justice and Law Enforcement. See the MCTC Law Enforcement website and/or call the center at 651-999-7600 for additional information.

General Education Courses (30 credits)

To complete the Law Enforcement A.S. degree, students are required to successfully complete 30 credits of general education coursework. Twenty-five of these credits are specified in the program requirements. The remaining five credits can be selected from any of the MnTC goal areas.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Legal Office Specialist

- Legal Office Specialist Certificate—27 credits

What You Will Learn

This program will provide you with the skills and proficiencies required to work in modern law offices, legal departments of corporations, government offices, legal aid offices and courts. The coursework will develop your skills for processing legal documents, understanding legal terminology and documentation, working with legal software applications, executing law office procedures, keeping records, billing, becoming aware of applicable policies and regulations for the Minnesota legal system, and comprehending professional standards and ethics.

Where You Could Work

- Court systems
- Private legal offices and firms
- Federal, state, and local government offices
- Administrative agencies
- Corporate legal departments
- Real-estate offices
- Legal transcription services
- General offices

Note: This program is the result of a unique partnership with the 12 largest Downtown Minneapolis law firms. Representatives from these law offices assisted with the creation of the curriculum for this award and are seeking qualified graduates of this program.

Students are accepted into this program for fall and spring semesters only. An opportunity to receive credit for prior learning or experience in the form of MCTC's Credit by Exam process is available.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.
- **Writing:** Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Legal Office Specialist Certificate

Credits: 27

Introductory Courses

(Listed below are the required courses we suggest students chose from during their first semester).

Course #	Course Name	Credits
BTEC 1020	Introduction to Computer Applications. . .	3.00
BTEC 1060	Keyboarding	3.00
BTEC 1160	Legal Office Procedures	3.00
BTEC 1835	Business English	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BTEC 1165	Legal Transcription.	3.00
BTEC 2375	Written Business Communication.	3.00
BTEC 2775	Power Keyboarding	3.00
SPCH 1010	Interpersonal Communication	3.00
BTEC 1080	Microsoft Word	3.00

General Education Courses (3 credits)

To complete the Legal Office Specialist Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

Note: SPCH 1010 satisfies Goal Area 1.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning the first semester in the program.

Library Information Technology

- Library Information Technology
A.S. Degree—60 credits
- Technical Information Services Certificate—20 credits
- Public Information Services Certificate—14 credits

What You Will Learn

MCTC's Library Information Technology program will equip you with the practical and conceptual skills needed to work in highly automated libraries and information agencies.

The program will cover automated library circulation, acquisitions, serials and cataloging systems, and computer applications unique to the industry. You will be trained to effectively search online databases and the Internet and provide effective user services. You will also learn about ethical and legal issues related to information use and production, and develop skills for critical thinking and moral reasoning.

As part of the degree program, you will have the opportunity to take special courses dealing with alternative media and participate in a semester-long internship.

The A.S. degree is designed for persons seeking careers as paraprofessionals and for anyone wishing to transfer elsewhere for a bachelor's degree. The certification programs are designed for those already working in libraries and information agencies who seek additional education and training.

MCTC has pending articulation agreements with other nearby institutions.

Where You Could Work

- Public libraries
- Academic libraries
- School media centers
- Corporate libraries
- Special libraries
- Bookstores
- Database and indexing companies

How You Apply

To apply to this program, students must submit a general College Application, attend an Orientation session (in person or online) and take the reading and writing assessment tests, or receive an assessment waiver from a counselor or advisor.

Both the Public and Technical Information Services certificates are offered as entirely online programs. All courses are offered in a Web-based format using the College's Desire2Learn course management software. The required library program courses for the A.S. degree are offered in an online format (INFS 1000, LIBT 1100, LIBT 1200, LIBT 1300, LIBT 2200, LIBT 2210, LIBT 2300, LIBT 2500, and LIBT 2900). Most of the liberal arts courses for the A.S. degree can also be taken online. However, you cannot complete the entire A.S. degree in an online format. For more information about options to complete the A.S. degree without attending classes in Minneapolis consult the Library Information Technology program web page located on the MCTC website <http://www.minneapolis.edu/>.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, their must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.

If students place into lower-level courses, they must complete the appropriate developmental coursework before they are admitted into the program. Non-degree-seeking students may be waived from program course prerequisites. To receive a course prerequisite waiver, students must contact either the course instructor or the Information Studies department coordinator.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Library Information Technology A.S. Degree

Credits: 60

First Semester

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
INFS 1000	Information Literacy and Research Skills	2.00
LIBT 1100	Introduction to Information Science and Information Agencies	3.00
SPCH 1000	Fundamentals of Communication	3.00
OR		
SPCH 1010	Interpersonal Communication	3.00
OR		
SPCH 1011	Group Process and Discussion	3.00
OR		
SPCH 1012	Intercultural Communication	3.00
Elective course from MnTC Goal Areas 3-10		3.00

Second Semester

Course #	Course Name	Credits
CSCI 1200	Computer Application in Home and Business	3.00
ENGL 1111	College English 2	3.00
LIBT 1200	Introduction to Technical Information Services	3.00
LIBT 1300	Introduction to Public Information Services	3.00
Elective course from MnTC Goal Areas (SOCI 11660 recommended)		3.00

Third Semester

Course #	Course Name	Credits
LIBT 2210	Introduction to Indexing and Abstracting	3.00
LIBT 2300	Online Searching and Reference Services	3.00
INFS 2600	Ideas, Censorship and Politics	3.00
Elective courses from MnTC Goal Areas (INFS 2520 plus one other recommended)		6.00

Fourth Semester

Course #	Course Name	Credits
LIBT 2200	Introduction to Cataloging	3.00
LIBT 2500	Information Ethics and Legal Issues	3.00
LIBT 2900	Information Agency Internship	4.00
Elective courses from MnTC Goal Areas		6.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (18 credits)

To complete the Library Information Technology A.S. degree, students are required to successfully complete an additional 18 credits of general education coursework. This coursework must be selected from at least four of the MnTC goal areas. Specific courses that are recommended are INFS 2510, SOCI 1160, and an MnTC Goal Area 1 Speech course (SPCH 1000, SPCH 1010, SPCH 1011 or SPCH 1012).

Public Information Services Certificate

Credits: 14

Course #	Course Name	Credits
INFS 1000	Information Literacy and Research Skills	2.00
LIBT 1100	Introduction to Information Science and Information Agencies	3.00
LIBT 1300	Introduction to Public Information Services	3.00
LIBT 2300	Online Searching and Reference Services	3.00
LIBT 2500	Information Ethics and Legal Issues	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Technical Information Services Certificate

Credits: 20

Course #	Course Name	Credits
INFS 1000	Information Literacy and Research Skills	2.00
LIBT 1100	Introduction to Information Science and Information Agencies	3.00
LIBT 1200	Introduction to Technical Information Services	3.00
LIBT 2200	Introduction to Cataloging	3.00
LIBT 2210	Introduction to Indexing and Abstracting	3.00
LIBT 2500	Information Ethics and Legal Issues	3.00
ENGL 1110 or SPCH 1000, 1010, 1011, or 1012		3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Machine Tool Technology

- Machine Tool Technology Diploma—64 credits

What You Will Learn

MCTC's Machine Tool Technology program will give you the technical and problem-solving skills needed to work in the metals manufacturing and processing industries.

You will receive a solid foundation in basic skills, plus extensive instruction in advanced manufacturing processes. During the program, you will practice the art of traditional machining while you learn the applications of computers, including: computer-integrated machining, computer-aided design and manufacturing, and computer programming. You will also be trained in important safety and measurement techniques, learn how to interpret detailed blueprints, and perform key mathematical calculations.

You will receive hands-on experience as you perform the turning, milling, drilling and grinding concepts learned in the classroom. In addition, you will have the opportunity to work with other class members on team projects to develop valuable teamwork and communications skills that reflect those needed in the industrial setting.

To enroll in the Machine Tool Technology program, you should be in good physical condition, as some heavy lifting is required. You should also have good hand-eye coordination to perform tasks necessary in the profession. Measuring devices and hand tools are provided. However, over the course of the program, you will be encouraged to purchase your own tools.

Schedule a laboratory tour and discuss the program by calling Kim Munson at 612-659-6093.

MCTC's Machine Tool Technology program is a member college of 360°, a Minnesota State Colleges and Universities Center of Excellence in Manufacturing and Applied Technology. Visit their website at www.360mn.org for more information on career ladder programs offered by 360° colleges and Bemidji State University.

Where You Could Work

- Medical and aerospace manufacturers
- Prototype and tool-making manufacturers
- Semiconductor and service parts manufacturers
- Parts production companies
- Parts repair facilities

Students are accepted into this program for fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or be declared ready to enroll in MATH 0080 on the basis of their math placement test scores.

Machine Tool Technology Diploma

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
MTTC 1000	Safety/Measurement/Metrology	4.00
MTTC 1010	Blueprint Reading 1	3.00
MTTC 1015	Applied Machine Shop Math 1	2.00
MTTC 1025	Drills and Drilling Machines	2.00
MTTC 1525	Benchwork/Power Saws	4.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
MTTC 1020	Engine Lathe	5.00
MTTC 1510	Vertical Milling	4.00
MTTC 1515	Applied Machine Shop Math 2	2.00
MTTC 1520	Blueprint Reading 2	3.00
MTTC 1530	Advanced Lathes Lab	4.00
MTTC 2005	Grinding	5.00
MTTC 2010	Advanced Milling Lab	4.00
MTTC 2020	Geometric Tolerancing	2.00
MTTC 2520	Welding for Machinists	2.00
	General Education Courses (see next page)	9.00
	Elective Courses (see next page)	7.00
ITEC 1100	Information Technology Concepts	2.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

General Education Courses (9 credits)

To complete the Machine Tool Technology Diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Elective Courses

<i>Course #</i>	<i>Course Name</i>	<i>Credits</i>
MTTC 1030	Machine Trades for Related Careers. . . .	2.00
MTTC 2035	CNC Programming and Operation	4.00
MTTC 2040	CNC Milling Center	3.00
MTTC 2045	CNC Turning Center	3.00
MTTC 2055	Advanced Machining Skills	5.00

Mathematics

- Mathematics A.S. Degree—60 credits

What You Will Learn

The Mathematics associate in science degree is specifically designed to prepare students for transfer into the junior or third year of a mathematics major in a four-year college or university.

Students are accepted into this major both fall and spring semesters.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052, OR be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051, OR be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 1110 and MATH 1120, OR be declared ready to enroll in MATH 1180 on the basis of their mathematics placement test scores.

MCTC has an articulation agreement with the University of Minnesota, which provides for transfer of the A.S. in Mathematics to the B.A. (College of Liberal Arts) and B.S. (Institute of Technology) degrees in Mathematics.

Mathematics A.S. Degree

Credits: 63

First Semester

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
MATH 1180	Calculus 1	5.00
PHYS 1211	Physics for Science and Engineering 1	6.00

Second Semester

Course #	Course Name	Credits
MATH 1190	Calculus 2	5.00
PHYS 1221	Physics for Science and Engineering 2	6.00
MnTC Goal Area 7, 8, 9 or 10		3.00
General Education Elective Courses (see list at right)		3.00

Third Semester

Course #	Course Name	Credits
*CSCI 1700	Introduction to Computer Programming in Java	3.00
OR		
*CSCI 1730	Introduction to Object-Oriented Programming With C++	4.00
OR		
*CSCI 1901	Structure of Computer Programming 1	4.00
MATH 2220	Multivariable Calculus	5.00
General Education Elective Courses (see below)		6.00

* Take one of the following: CSCI 1700, CSCI 1730 or CSCI 1901.

Fourth Semester

Course #	Course Name	Credits
MATH 2011	Discrete Mathematics	4.00
MATH 2210	Linear Algebra and Differential Equations	5.00
General Education Courses (see below)		6.00

General Education Courses (18 credits)

General Education Courses must be selected from the Minnesota General Education Transfer Curriculum (MnTC). These credits must be distributed across a minimum of six of the 10 MnTC goal areas. Students are required to successfully complete three credits in Goal Area 1, and three credits in Goal Areas 7, 8, 9 or 10. The required courses for this degree fall into the following MnTC goal areas:

- Goal Area 1: ENGL 1110
- Goal Area 3: PHYS 1211, PHYS 1221
- Goal Area 4: MATH 1180, MATH 1190, MATH 2210, MATH 2220, PHYS 1211 and PHYS 1221

The following are recommended course options for the remaining 18 **elective** general education credits:

BIOLOGICAL SCIENCES WITH LAB

Take at least one of the following courses or course combinations:

- BIOL 1100, BIOL 1127 **and** BIOL 1128, BIOL 1136 **and** BIOL 1137, BIOL 2200

SOCIAL SCIENCES

Take at least two of the following courses:

- ANTH 1105
- ECON 2000, ECON 2200 or ECON 2500
- GEOG 1101, GEOG 1103, GEOG 1104 or GEOG 2204
- PSCI 1101, PSCI 1103, PSCI 1104, PSCI 1110 or PSCI 1140
- PSYC 1100 or PSYC 1110
- SOCI 1105, SOCI 1110, SOCI 1160 or SOCI 1170

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

HISTORY

Take at least one of the following courses:

- AMIS 1000
- HIST 1000, HIST 1010, HIST 1020, HIST 1100, HIST 1110, HIST 1200, HIST 1210, HIST 1300, HIST 1310, HIST 1320, HIST 1500, HIST 1520, HIST 1600, HIST 2241 or HIST 2242

ARTS AND HUMANITIES

Take at least one of the following courses:

- ENGL 1151, ENGL 1152, ENGL 1153, ENGL 1154, ENGL 1156, ENGL 1157 or ENGL 1160

Take at least one of the following courses:

- ACES 1000, ACES 1121, ACES 1122, ACES 1132 or ACES 1190
- ARTS 1110, ARTS 1111, ARTS 1112, ARTS 1113, ARTS 1121, ARTS 1125, ARTS 1132, ARTS 1133, ARTS 1141 or ARTS 1142
- FILM 1310 or FILM 1320
- MUSC 1000, MUSC 1010, MUSC 1020 or MUSC 1150
- PHIL 1171
- THTR 1104, THTR 1131 or THTR 2150
- WOST 1140

Although it is not one of the required program courses, it is recommended that students also take MATH 1150, Statistical Analysis, as one of the general education electives.

Students seeking the Mathematics A.S. degree should work closely with a counselor or advisor when choosing general education coursework to ensure their selections meet the requirements of the college or university to which the student intends to transfer.

Media Production

*Beginning fall term 2010, the MPRO program will transition to new advanced certificate awards integrated within the broader Cinema Division curriculum. Existing MPRO awards will no longer be offered after the 2010-2011 academic year; however, new students should refer to advanced certificates that incorporate the latest technology in the field of Digital Animation (ANIM), Cinematic Visual Effects (CVFX), and Sound for Cinema (SNDC) found in this catalog.

- Dynamic Digital Media A.A.S. Degree — 60 credits
- Interactive Media Diploma — 39 credits
- Computer Graphic Imaging (CGI) Diploma — 40 credits
- Digital Video (DV) Certificate — 30 credits
- Sound for Media Certificate — 21 credits

What You Will Learn

MCTC's Media Production program will train you to creatively and dynamically convey information by combining graphic and photographic images with video, animation, audio and music.

You will learn digital capture and output, using industry standard hardware and software to create professional-quality media products. You will also receive hands-on training in preproduction, audio recording and editing, lighting, studio and location video acquisition, linear and nonlinear video editing, two- and three-dimensional computer animation, QuickTime Virtual Reality, multimedia authoring, DVD Authoring, Surround Sound and HDV (High-Definition Video).

MCTC's program is one of the most advanced in the state for DVD production (including Standard-definition and BluRay/HD-DVD) and authoring, as well as and one of the first programs to offer HDV training. You will have an opportunity to put your creativity and imagination to work on production assignments using the most current audio and video equipment and computer hardware and software.

The work you produce during the program can be used to create a well-rounded portfolio, which is necessary for entry into the field. MCTC's instructors will help you prepare your portfolio and give you guidelines on job seeking and portfolio presentation. They also will help place you in an internship wherein you can put your new skills to work.

To participate in the program, MCTC recommends you have good eye-hand coordination and the ability to see and differentiate colors. Students enrolled will need to purchase headphones, blank CD-Rs, DVD-Rs and DV tapes.

Many students build or buy their own computer workstations, but our well-equipped media labs are also available for project work.

Where You Could Work

- Production houses
- Postproduction houses
- TV stations
- Audio studios
- Service bureaus
- Ad agencies
- Animation studios
- Independent production

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052, or have completed READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Dynamic Digital Media A.A.S. Degree

Credits: 60

Suggested First Semester Schedule:

Course #	Course Name	Credits
MPRO 1111	Intro to Dynamic Media Software	3.00
MPRO 1150	Scriptwriting for Media	3.00
MPRO 1200	Audio for Dynamic Media.	3.00
MPRO 1201	Video Basics—Single Camera	3.00
MPRO 1202	Beginning Digital Animation	3.00

Suggested Second Semester Schedule:

Course #	Course Name	Credits
MPRO 1203	Motion Graphics Software	3.00
MPRO 2101	Real-Time & Multi-Camera Video.	3.00
GRPH 2110	Adobe Photoshop	3.00
CIST 1101	Cinema History 1	3.00
General Education Courses MnTC (1)		3.00

Suggested Third Semester Schedule:

Course #	Course Name	Credits
MPRO 2111	Interactive Design and Production.	3.00
MPRO 1120	Media Systems.	3.00
MPRO 2113	Independent Project	1.00
CIST 1102	Cinema History 2	3.00
Elective from MPRO, PHDI, GRPH, WEBI		3.00

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Suggested Fourth Semester Schedule:

Course #	Course Name	Credits
MPRO 2440	Business of Media	2.00
MPRO 2450	Portfolio Show	3.00
MPRO 2100	Advanced Audio for Media	3.00
Elective from MPRO, PHDI, GRPH, WEBI.		3.00
General Education Courses.		6.00

General Education Courses (15 credits)

To complete the Dynamic Digital Media A.A.S. Degree, students are required to successfully complete 15 credits of general education coursework. The coursework must be selected from at least three of the MnTC Goal Areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9, or 10. Note: CIST 1101 and 1102 satisfy Goal Area 6.

Interactive Media Diploma

Credits: 39

First Semester

Course #	Course Name	Credits
MPRO 1111	Intro to Dynamic Media Software	3.00
MPRO 1200	Audio for Dynamic Media.	3.00
MPRO 1120	Media Systems.	3.00
MPRO 1150	Scriptwriting for Media.	3.00
MPRO 2111	Interactive Design and Production.	3.00

Second Semester

Course #	Course Name	Credits
MPRO 2440	Business of Media	2.00
WEBI 1416	Web Layout and Design	3.00
GRPH 2110	Adobe Photoshop	3.00
General Education Courses.		3.00

Third Semester

Course #	Course Name	Credits
MPRO 2113	Independent Project	1.00
WEBI 1711	Web Tools—Dreamweaver	3.00
WEBI 1811	Web Animation.	3.00
General Education Courses.		6.00

General Education Courses (6 credits)

To complete the Interactive Media Diploma, students are required to successfully complete six credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Computer Graphic Imaging Diploma

Credits: 37

First Semester

Course #	Course Name	Credits
MPRO 1111	Intro to Dynamic Media Software	3.00
MPRO 1150	Scriptwriting for Media	3.00
MPRO 1200	Audio for Dynamic Media.	3.00
MPRO 1202	Digital Animation Basics.	3.00
MPRO 1120	Media Systems.	3.00

Second Semester

Designator/	Course #	Course Name	Credits
	MPRO 1203	Motion Graphics Software	3.00
	MPRO 2230	Advanced 3D Animation.	3.00
	MPRO 2402	CGI Advanced Software	3.00
	GRPH 2110	Adobe Photoshop	3.00
General Education Courses MnTC 1			3.00

Third Semester

Course #	Course Name	Credits
WEBI 1811	Web Animation.	3.00
MPRO 2113	Independent Project	1.00
General Education Courses MnTC 6–9		3.00

General Education Courses (6 credits)

To complete the Computer Graphic Imaging Diploma, students are required to successfully complete six credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Digital Video Certificate

Credits: 30

First Semester

Course #	Course Name	Credits
MPRO 1111	Intro to Dynamic Media Software	3.00
MPRO 1150	Scriptwriting for Media.	3.00
MPRO 1201	Video Basics—Single Camera	3.00
MPRO 1120	Media Systems.	3.00
MPRO 1200	Audio for Dynamic Media.	3.00

Second Semester

Course #	Course Name	Credits
MPRO 2101	Real-Time and Multi-Camera Video	3.00
MPRO 2440	Business of Media	2.00
CIST 1101	Cinema History 1	3.00
CIST 1102	Cinema History 2	3.00
MPRO 2113	Independent Project	1.00
General Education Courses.		3.00

General Education Courses (9 credits)

To complete the Digital Video Certificate, students are required to successfully complete three credits of general education coursework. This coursework must be selected from MnTC Goal Area 1. Note: CIST 1101 and CIST 1102 satisfy Goal Area 1.

Sound for Media Certificate

Credits: 21

Course #	Course Name	Credits
MPRO 1111	Intro to Dynamic Media Software	3.00
MPRO 1200	Audio for Dynamic Media.	3.00
MPRO 1120	Media Systems.	3.00
MPRO 1150	Scriptwriting for Media	3.00
MPRO 2100	Advanced Audio for Media	3.00
MPRO 2440	Business of Media	2.00
MPRO 2113	Independent Project	1.00
General Education Courses.		3.00

General Education Courses (3 credits)

To complete the Sound for Media Certificate, students are required to successfully complete three credits of general education coursework. This coursework must be selected from MnTC Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Medical Office Assistant

- Medical Office Assistant Diploma—40 credits

What You Will Learn

In MCTC's Medical Office Assistant program, you will learn the clerical, computer and administrative support skills you need to become a key staff member for health-related organizations.

The program will familiarize you with medical terminology, biology, hospital and laboratory office procedures, plus give you background in insurance coding and forms processing. Extensive hands-on experience with the latest computer hardware and software applications is central to the program. You will also be shown specifically how to apply those skills in a medical environment. Classes also will focus on human relations, oral communication and professional development skills.

While earning your Medical Office Assistant diploma, you will receive further training to prepare correspondence, schedule appointments, record and chart information, and handle billings, as well as and to assist doctors and scientists with preparing speeches, articles, and conference proceedings.

Your job placement opportunities are likely to be excellent, as there is a high demand for trained medical office assistants. There may even be the opportunity to work from home.

Where You Could Work

- Medical offices and clinics
- Hospitals
- Nursing homes
- Dental offices
- Insurance companies

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Medical Office Assistant Diploma

Credits: 40

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
BIOL 1127	Human Biology	3.00
BTEC 1010	Fundamentals of Business Computers	2.00
BTEC 1060	Keyboarding	3.00
BTEC 1125	Medical Terminology and Disease Condition 1	3.00
BTEC 2375	Written Business Communications	3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
BTEC 1080	Microsoft Word	3.00
BTEC 1275	Medical Office Procedures	3.00
BTEC 1700	Medical Insurance Coding	3.00
BTEC 1770	Claims and Reimbursement	3.00
BTEC 2100	Microsoft Excel	3.00
BTEC 2125	Medical Terminology and Disease Condition 2	3.00
BTEC 2825	Career Management	2.00
General Education Courses (see below)		3.00
Elective Courses (see below)		3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Medical Office Assistant diploma, students are required to successfully complete BIOL 1127 and three additional credits from MnTC Goal Area 1.

Electives (3 credits)

Program electives may be selected from any ACCT, BTEC or BUSN courses. Internships are recommended.

Course #	Course Name	Credits
BTEC 2450	Internship	1.00–4.00

Nursing

MCTC's Nursing Programs are accredited by the National League for Nursing Accrediting Commission (3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, 404-975-5000), and approved by the Minnesota Board of Nursing.

- Practical Nursing Diploma—36 credits
 - Nursing Mobility Program A.S. Degree—73 credits
- Option A.** MCTC First Year Practical Nursing Students
Option B. Licensed Practical Nurses

What You Will Learn

MCTC's Nursing Program prepares you to take the National Council Licensure Exam to become a practical and/or a registered nurse. Each serves a vital function as a member of the healthcare team.

MCTC's accomplished faculty are committed to providing a high quality educational experience. The curriculum follows a leveled four semester sequence that allows you to continue through one or both years of the program on a full- or part-time basis. You will have the option to earn a diploma in Practical Nursing after successful completion of the first two semesters of the program. You may then continue into the second year of the curriculum and, upon successful completion, be eligible to earn an A.S. Degree in Nursing. This format allows you the flexibility required to fit your schedule, career choice, and specific interests.

During the first two semesters of the program leading to a Practical Nursing Diploma, you will be taught to collect data regarding a client's physical and mental functioning, administer prescribed medications and treatments, monitor client status, and perform delegated nursing care, all under the supervision of a registered nurse. You also will learn to develop rapport with patients and maintain client confidentiality.

If you choose to continue your studies in the second year of the Nursing Mobility Program (**Option A**), in order to obtain an A.S. Degree in nursing and prepare to take the National Council Licensure Exam to become a registered nurse, you will be taught how to promote health, prevent disease, and help clients cope with illness. You will also learn to act as a client advocate, health educator; provide direct patient care; develop and manage plans of care; and help individuals and groups take steps to improve or maintain their health.

Students in the Nursing Program take numerous general education courses and receive instruction in nursing theory, as well as complete specialized courses in health assessment, family nursing, and psychosocial nursing. You will learn to

care for clients across the life span and the health-illness continuum. You will also receive clinical instruction under the guidance and supervision of experienced MCTC nursing faculty in a variety of hospitals and healthcare agencies in the metropolitan area.

If you are a Licensed Practical Nurse, the Nursing Mobility Program (**Option B**) enables you to earn an A.S. Degree in Nursing upon successful completion of two transition courses and semesters three and four of the Nursing Mobility Program.

MCTC has articulation agreements with Metropolitan State University and the MnSCU consortium, as well as with many private institutions, to permit seamless progression into Bachelor of Science Nursing Degree programs.

Where You Could Work

- Hospitals
- Clinics
- Extended-care facilities
- Home healthcare agencies
- Ambulatory surgery centers
- Urgent care centers

How You Apply

To apply for this program, students must submit an MCTC Nursing Program Application. There is a separate application process for the Nursing Mobility **Option B**. Students are accepted into the Nursing Program fall or spring semester.

To be considered for admission to the Nursing Program, applicants must meet a Nursing Assistant requirement, place into college-level writing and reading (applicants must take the reading assessment test **regardless of degrees held**), either complete MATH 0070 or MATH 0077 or place into MATH 0080 or above, and have completed one or more specified science courses. For full information about Nursing Program admission requirements and to view both Nursing Program applications, see www.minneapolis.edu, Career Programs, Nursing (Practical and A.S. Degree in Nursing).

Important information when considering application to the Nursing Program

Since it is vital to maintain high standards in all healthcare facilities, admitted students must adhere to strict health policies and meet specific criteria to maintain their student status in the Nursing Program. Students must submit a completed health examination form, immunity form, and meet specific health requirements identified in these two forms. Students must hold current certification in CPR for the Health Care Professional throughout the time they are a student in the program.

(continued on next page)

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Also, students **must pass a criminal background check** each academic year they are students in the Nursing Program. MCTC is not able to guarantee placement of students in a clinical facility if the criminal background check is not clear. Applicants should be aware that students in the Nursing Program are assigned in clinical coursework each of the four semesters of the program and that students cannot satisfactorily complete the required clinical courses and progress in the program if they cannot be placed in a clinical facility due to a failed criminal background check.

Further, students will need to maintain these high standards throughout the program to be employment-eligible when applying for positions in nursing upon graduation. You will again need to pass a criminal background check, pass the National Council Licensure Exam (NCLEX) and be licensed by the Minnesota State Board of Nursing as a practical and/or professional nurse to be employed in Minnesota.

Practical Nursing Program Diploma

Total Credits: 36

25 Nursing Credits

11 General Education Credits

To complete the Practical Nursing Diploma, students are required to successfully complete 11 credits of general education coursework. The specific general education courses required are ENGL 1110, BIOL 2224, and PSYC 2240 or transfer equivalent.

One of the following — NURS 1550, NURS 1850, NURS 1885 or GHHA 1300 — must be completed prior to achieving the Practical Nursing Diploma. These classes can be taken either in the First Semester or the Second Semester of the Program.

The following course sequence is required, with grades of “C” or above, for completion of this program.

First Semester

Course #	Course Name	Credits
BIOL 2224	Anatomy	4.00
NURS 1000	Foundations of Nursing	3.00
NURS 1050	Clinical Foundation	3.00
NURS 1075	Nursing Interventions	2.00
NURS 1200	Medication Administration 1.	1.00
NURS 1250	Medication Administration 2.	1.00
PSYC 2240	Lifespan Development	4.00

Second Semester

Course #	Course Name	Credits
ENGL 1110	College English 1	3.00
NURS 1300	Application of Nursing	4.00
NURS 1350	Clinical Application	4.00
NURS 1425	Family Nursing	4.00
NURS 1600	Psychosocial Nursing	2.00

Course #	Course Name	Credits
*NURS 1550	Complementary Therapies: A Service Learning Approach	1.00

OR

*NURS 1850	Transcultural Nursing: A Service Learning Approach	1.00
------------	--	------

* Take one of the following: NURS 1550, NURS 1850, NURS 1885 or GHHA 1300.

Nursing Mobility Program A.S. Degree

Option A: MCTC First Year Practical Nursing Students

Total Credits: 73

43 Nursing Credits

30 General Education Credits

Credits from first year MCTC PN program:

24–25 Nursing Credits

11 General Education Credits

Credits from second year A.S. program:

18–19 Nursing Credits

19 General Education Credits

Students are not required to apply to receive the MCTC Practical Nursing Diploma, but must successfully complete the First and Second Semester of the Practical Nursing Program to continue with **Option A** of the Mobility Program.

The following course sequence is required, with grades of “C” or above, for completion of this program.

Third Semester

Course #	Course Name	Credits
*BIOL 1120	Nutrition	3.00
OR		
*BIOL 2230	Microbiology	2.00
BIOL 2225	Physiology	4.00
NURS 2000	Integration of Nursing	3.00
NURS 2010	Health Assessment	3.00
NURS 2050	Clinical Integration	4.00
General Education Courses (see below)		2.00

* Take one of the following: BIOL 1120 or BIOL 2230.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Fourth Semester

Course #	Course Name	Credits
BIOL 2226	Pathophysiology	2.00
NURS 2100	Synthesis Theory	3.00
NURS 2150	Synthesis Clinical	5.00
General Education Courses (see below)		9.00

NURS 1550 or NURS 1850 must be completed prior to the completion of the Practical Nursing Diploma and/or the A.S. Degree.

Course #	Course Name	Credits
NURS 1550	Complementary Therapies: A Service Learning Approach	1.00
NURS 1850	Transcultural Nursing: A Service Learning Approach	1.00

General Education Courses (30 Credits)

To complete the A.S. degree in Nursing, students are required to successfully complete 30 credits of general education coursework selected from at least six of the 10 MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and a minimum of three credits from Goal Areas 7, 8, 9 or 10.

Specific courses that are **required** for the A.S. degree are ENGL 1110, BIOL 2224, BIOL 2225, BIOL 2226, BIOL 2230 or BIOL 1120, and PSYC 2240.

Recommended courses include: SPCH 1012, MATH 1150, ANTH 1105, ANTH 1150, PSYC 1110, SOCI 1110, SOCI 2115, SOCI 2150, ENGL 1157, PHIL 1110, ACES 1132, PHIL 1171, ACES 1190, WOST 2211, GEOG 2204 or PSYC 2260.

Nursing Mobility Program A.S. Degree

Option B: Licensed Practical Nurses

To be admitted to the **Option B** Mobility Program, students must have their License in Practical Nursing and have completed English (composition course), Anatomy, and Lifespan Development with grades of "C" or above.

Total credits: 73

43 Nursing Credits

30 General Education Credits

Credits from PN Diploma:

22 Advanced Standing Nursing Credits

11 General Education Credits (Program prerequisites of English, Anatomy and Lifespan Development)

Credits from second year A.S. program:

21 Nursing Credits

19 General Education Credits

Total Credits: 73

It is recommended that students take as many required general education courses as possible before beginning the program. Twenty-two Nursing credits from your Practical Nursing diploma are transferable into the Associate of Science in Nursing Degree as advanced standing credits.

The following course sequence is required, with grades of "C" or above, for completion of this program.

First Semester

Course #	Course Name	Credits
NURS 1900	Nursing Role Transition	2.00
NURS 1950	Nursing Role Transition Practicum	1.00

Upon completion, students then move into semester three and four of the Nursing Mobility Program **Option B**.

Third Semester

Course #	Course Name	Credits
*BIOL 1120	Nutrition	3.00
OR		
*BIOL 2230	Microbiology	2.00
BIOL 2225	Physiology	4.00
NURS 2000	Integration of Nursing	3.00
NURS 2010	Health Assessment	3.00
NURS 2050	Clinical Integration	4.00
General Education Courses (see below)		2.00

* Take one of the following: BIOL 1120 or BIOL 2230.

Fourth Semester

Course #	Course Name	Credits
BIOL 2226	Pathophysiology	2.00
NURS 2100	Synthesis Theory	3.00
NURS 2150	Synthesis Clinical	5.00
General Education Courses (see below)		9.00

General Education Courses (30 Credits)

To complete the A.S. degree in Nursing, students are required to successfully complete 30 credits of general education coursework selected from at least six of the 10 MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and a minimum of three credits from Goal Areas 7, 8, 9 or 10.

Specific courses that are **required** for the A.S. degree are ENGL 1110, BIOL 2224, BIOL 2225, BIOL 2226, BIOL 2230 or BIOL 1120, and PSYC 2240.

Recommended courses include: SPCH 1012, MATH 1150, ANTH 1105, ANTH 1150, PSYC 1110, SOCI 1110, SOCI 2115, SOCI 2150, ENGL 1157, PHIL 1110, ACES 1132, PHIL 1171, ACES 1190, WOST 2211, GEOG 2204 or PSYC 2260.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Nursing Assistant/ Home Health Aide

- Nursing Assistant/Home Health Aide Certificate—5 credits
- Nursing Assistant/Home Health Aide Extended Hour Certificate—6 credits
- Acute Care Option—3 credits

What You Will Learn

MCTC offers nursing coursework that provides a pathway that prepares you to take the licensing exam to become a practical and/or a registered nurse. This pathway begins with a Nursing Assistant requirement, which can be met through successful completion of NAHA 1819: Nursing Assistant/Home Health Aide or NAHA 1850: Nursing Assistant/Home Health Aide Extended Hour.

Successful completion of NAHA 1819 or NAHA 1850 prepares you to take the Nursing Assistant Test Out, which, if passed, places you on the Minnesota Department of Health Nursing Assistant Registry and qualifies you for employment in MN Department of Health-approved long-term care facilities as a Nursing Assistant.

For full information about the MCTC Nursing Program admission requirements and application, see www.minneapolis.edu, Career Programs, Nursing (Practical and A.S. Degree in Nursing).

Where You Could Work

- Nursing homes
- Home healthcare agencies
- Assisted living facilities

How You Apply

To register in any of these courses, you must submit a College Application and pass a reading assessment test. Registration may be done online or in person at the College.

Students are accepted into this course fall, spring and summer terms.

Important information when considering registering for a NAHA course

- All students registered in a NAHA course **must pass a criminal background check** prior to assignment in a clinical facility. MCTC is not able to guarantee placement of students in a clinical facility if the criminal background check is not passed. You should know that all NAHA courses include a clinical component which must be satisfactorily completed in order to pass the course.

- The NAHA 1819: Nursing Assistant/Home Health Aide course has a very strict attendance policy put in place in order to meet the Minnesota Department of Health requirements for approved nursing assistant programs. For this reason, **attendance at ALL class and clinical hours is mandatory** in order to satisfactorily complete NAHA 1819.

Nursing Assistant/Home Health Aide Certificate

Credits: 5

Course #	Course Name	Credits
NAHA 1819	Nursing Assistant/ Home Health Aide	5.00

NAHA 1819 requires achievement of the following academic skill level:

- **Reading:** Placement into READ 0200 or ESOL 0052.

Nursing Assistant/Home Health Aide Extended-Hour Certificate

Credits: 6

Course #	Course Name	Credits
NAHA 1850	Nursing Assistant/ Home Health Aide Extended Hour	6.00

NAHA 1850 requires achievement of the following academic skill level:

- **Reading:** Placement into READ 0100 or ESOL 0042.

Acute Care Option

Credits: 3

Course #	Course Name	Credits
NAHA 1900	Acute Care Skills for Nursing Assistants	3.00

Prerequisites: Successful completion of NAHA 1819 or NAHA 1850 **and** current Nursing Assistant Registration.

Requirements for all NAHA courses must:

- Pass a criminal background check.
- Provide evidence of a negative mantoux or chest x-ray prior to first clinical date and within 90 days of the last clinical date.
- Own or purchase and wear a white nurse's uniform and white shoes that meet program criteria.
- Pay a liability insurance fee.
- Provide proof of immunity to specified diseases.

Phlebotomy

- Phlebotomy Certificate—16 credits
The Phlebotomy program is pending approval by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

What You Will Learn

The Phlebotomy Certificate program at MCTC is a 16-credit certificate that combines the Healthcare Core Curriculum, medical terminology and human biology with hands-on phlebotomy skills and theory to prepare students for employment as a phlebotomist. Phlebotomists are hired at a variety of healthcare settings and work as members of the healthcare team, obtaining patients' blood for medical testing and specimen processing.

The PHLE Program requires:

- Grades of "C" (2.0) or above in the PHLE theory course, other program-required courses that are graded A/F (HCCC 1100 and BIOL 1127/1128);
- Pass (P) grades in the HCCC courses graded P/F and the PHLE clinical internship course; and
- **Passing of a criminal background check prior to being placed in a PHLE internship.**
The College cannot guarantee placement in internships for students who do not have a clear background check.
For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at 651-297-7014.
- Providing evidence of immunity to specified diseases.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** Placement into READ 1300 or satisfactory completion of READ 0200 or ESOL 0052.
- **Writing:** Placement into ENGL 1110 or satisfactory completion of ENGL 0900 or ESOL 0051.
- **Math:** Placement into MATH 0070 or satisfactory completion of MATH 0060.

Where You Could Work:

- Doctors' offices
- Medical clinics
- Hospitals
- Blood donation centers

Phlebotomy Certificate

Credits: 16

Certificate requirements

Course #	Course Name	Credits
PHLE 1000	Phlebotomy	4.00
PHLE 1002	Phlebotomy Internship	3.00
HCCC 1010	Behaviors for Success in Health Careers	0.50
HCCC 1020	Communication in Health Care	1.00
HCCC 1030	Awareness and Sensitivity to Client Needs	0.50
HCCC 1040	Respecting Client and Staff Diversity	0.50
HCCC 1050	Health Care Safety Standard Precautions	0.50
HCCC 1060	Legal Issues in Health Care	0.50
HCCC 1070	Health Care Ethics	0.50
HCCC 1100	Medical Terminology	1.00
BIOL 1127	Human Biology	3.00
BIOL 1128	Human Biology lab	1.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Photography and Digital Imaging

- Photography and Digital Imaging A.A.S. Degree—64 credits
- Photography and Digital Imaging Diploma—52 credits
- Photography and Digital Imaging Certificate—28 credits

What You Will Learn

The Photography and Digital Imaging program at MCTC integrates the latest developments in digital photo technology while maintaining an emphasis on traditional photographic skills such as composition, exposure, camerawork and lighting.

Coursework covers metering and lighting techniques, portraiture, product, studio and location photography. You will use digital SLR cameras, high-end digital capture backs and the latest in digital capture technology. The complete digital workflow process is covered, from input to file management to color management through image output.

While being occupational and technical in nature, the Photography and Digital Imaging curriculum will encourage your creativity and individualized expression through hands-on assignments and personalized instruction. You will graduate from the program with a professional portfolio and a working knowledge of the professional photographic industry.

You will be required to provide your own digital SLR camera and lenses, professional light meter, supplies, visual curiosity and a desire to learn.

This program has an articulation agreement with Metropolitan State University and Bemidji State University.

Where You Could Work

- Photo studios
- Production houses
- Service bureaus
- Ad agencies

Students are accepted into this program for fall and spring semesters only.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or be declared ready to enroll in READ 0200 or ESOL 0052 on the basis of their reading placement test scores.

- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

Photography and Digital Imaging A.A.S. Degree

Credits: 64

First Semester

Course #	Course Name	Credits
PHDI 1010	Photo Composition and Design	2.00
PHDI 1110	Digital Photography 1	3.00
PHDI 1120	Lighting 1	3.00
GRPH 1130	Intro to Graphics Software	3.00
General Education Courses (see below)		6.00
*CIST 1106 History of Photography and one of the following: ENGL 1110 or SPCH 1010		

Second Semester

Course #	Course Name	Credits
PHDI 1230	Lighting 2	3.00
GRPH 2110	Photoshop	3.00
PHDI 1250	Digital Photography 2	3.00
PHDI 1270	Medium Format Photography	2.00
PHDI 1290	Flash Photography	2.00
General Education Courses (see below)		3.00

Third Semester

Course #	Course Name	Credits
PHDI 1240	Photo Assistant Training	2.00
PHDI 2120	Product Photography	3.00
PHDI 2130	Portrait Photography	3.00
Elective Courses (see below)		2.00
General Education Courses (see below)		6.00

Fourth Semester

Course #	Course Name	Credits
PHDI 2430	Media Business	3.00
PHDI 2210	Portfolio Development and Presentation	4.00
PHDI 2470	Internship	3.00
Elective Courses (see below)		2.00
General Education Courses (see below)		3.00

Elective Courses (4 credits)

Any MPRO, GRPH, WEBI, Cinema Division or PHDI courses.

General Education Courses (18 credits)

To complete the Photography and Digital Imaging A.A.S. Degree, students are required to successfully complete 18 credits of general education coursework. This coursework must include a minimum of three credits from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10. PHOT 1100 is recommended and is a Goal Area 6 course.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Photography and Digital Imaging Diploma

Credits: 52

First Semester

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
PHDI 1110	Digital Photography 1	3.00
PHDI 1010	Photo Composition and Design	2.00
PHDI 1120	Lighting 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
General Education Courses (see below)		3.00
*Take one of the following: ENGL 1110 or SPCH 1010.		

Second Semester

Course #	Course Name	Credits
PHDI 1230	Lighting 2	3.00
PHDI 1250	Digital Photography 2	3.00
PHDI 1270	Medium Format Photography	2.00
PHDI 1290	Flash Photography	2.00
GRPH 2110	Adobe Photoshop	3.00
General Education Courses (see below)		3.00
*FILM 1300		

Third Semester

Course #	Course Name	Credits
PHDI 2120	Product Photography	3.00
PHDI 2130	Portrait Photography	3.00
PHDI 1240	Photo Assistant Training	2.00
PHDI 1030	Photo and Studio Lab	1.00
General Education Courses (see below)		3.00

Fourth Semester

Course #	Course Name	Credits
PHDI 2430	Media Business	3.00
PHDI 2210	Portfolio Development and Presentation.	4.00
PHDI 2470	Internship	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (9 credits)

To complete the Photography and Digital Imaging Diploma, students are required to successfully complete nine credits of general education coursework. This coursework must be selected from at least two of the MnTC goal areas. A minimum of three credits must be completed from Goal Area 1 and three credits from Goal Areas 7, 8, 9 or 10.

Elective Courses

Any PHDI, MPRO, GRPH, WEBI or Cinema Division courses.

Photography and Digital Imaging Certificate

Credits: 28

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

First Semester

Course #	Course Name	Credits
PHDI 1110	Digital Photography 1	3.00
PHDI 1010	Photo Composition and Design	2.00
PHDI 1120	Lighting 1	3.00
GRPH 1130	Introduction to Graphics Software	3.00
General Education Courses (see below)		3.00
*Take one of the following: ENGL 1110 or SPCH 1010.		

Second Semester

Course #	Course Name	Credits
PHDI 1230	Lighting 2	3.00
PHDI 1250	Digital Photography 2	3.00
*PHDI 2120	Product Photography	3.00
OR		
*PHDI 2130	Portrait Photography	3.00
PHDI 1240	Photo Assistant Training	2.00
GRPH 2110	Adobe Photoshop	3.00

*Take one of the following: PHDI 2120 or PHDI 2130.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (3 credits)

To complete the Photography and Digital Imaging Certificate, students are required to successfully complete three credits of general education coursework from MnTC Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Polysomnographic Technology

The Polysomnographic Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
1361 Park Street, Clearwater, FL 33756
Phone: 727-210-2350

- Polysomnographic Technology A.A.S. Degree—60 credits

What You Will Learn

In the Polysomnographic Technology program at MCTC, you will gain the knowledge and the skills needed to perform quality sleep studies. Polysomnographic Technology graduates will be qualified to take the National Registry Exam and work in clinical sleep centers in hospitals across the nation, as well as in independent sleep centers. An understanding of sleep disorders and the therapies used to help patients sleep is the basis of the field study. Polysomnographic Technologists perform diagnostic sleep studies and interventions with patients. This program requires clinical experiences in accredited sleep centers. You must pass a background check and provide evidence of immunity status prior to placement in a healthcare setting.

The PSOM Program requires:

- Grades of "C" (2.0) or above in all PSOM theory and combination theory/lab courses and all program-required general education courses;
- Pass (P) grades in clinical internship and seminar courses; and
- **Passing of a criminal background check prior to being placed in a PSOM internship.** The College cannot guarantee placement in internships for students who do not have a clear criminal background check.

For more information about the background study process and disqualifying crimes, contact Roger Golden, Minnesota Department of Human Services, at (651) 297-7014.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or be declared ready to enroll in ENGL 1110.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0070 or MATH 0077 or be declared ready to enroll in MATH 0080.

Polysomnographic Technology A.A.S. Degree

Credits: 60

First Semester

Course #	Course Name	Credits
*BIOL 2224	Anatomy	4.00
OR		
*BIOL 1127	Human Biology	3.00
AND		
*BIOL 1128	Human Biology Lab.	1.00
*ENGL 1110	College English	
OR		
*ENGL 1108	Technical Writing.	3.00
PSYC 1110	General Psychology	4.00
BIOL 1190	Medical Terminology	2.00
COML 1100	Computer Literacy	2.00
*PSOM 1000	Introduction to Sleep and Rest	3.00
OR		
*HLTH 1000	Introduction to Sleep and Rest	3.00

*Take one of the following: BIOL 2224 **or** BIOL 1127 **and** BIOL 1128.

*Take one of the following: ENGL 1110 **or** ENGL 1108.

*Take one of the following: PSOM 1000 **or** HLTH 1000.

Second Semester

Course #	Course Name	Credits
PSYC 2240	Lifespan Psychology.	4.00
PSOM 1100	Fundamentals of Polysomnography . . .	3.00
PSOM 1200	Anatomy and Physiology of Sleep and Breathing.	2.00
PSOM 1300	Pathophysiology and Classification of Sleep Disorders.	2.00
SPCH 1012	Intercultural Communication	3.00
OR		
SPCH 1010	Interpersonal Communication	3.00

Third Semester

Course #	Course Name	Credits
PSOM 1400	Instrumentation in Polysomnography . .	5.00
PSOM 1500	Monitoring and Introduction to Therapeutic Interventions	4.00
PSOM 1650	Internship I	2.00
PSOM 1660	Internship Seminar I	1.00

Fourth Semester

Course #	Course Name	Credits
PSOM 2000	Polysomnographic Theory Integration . .	4.00
PSOM 2150	Internship II	3.00
PSOM 2160	Internship II Seminar	1.00
PSOM 2250	internship III	4.00
PSOM 2260	Internship III Seminar.	1.00
PSOM 2350	Internship IV	2.00
PSOM 2360	Internship IV Seminar.	1.00

General Education Courses (18 credits)

To complete the Polysomnographic Technology A.A.S. Degree, students are required to successfully complete 18 credits of general education coursework outlined above.

Restaurant Management

- Restaurant Management A.A.S. Degree—60 credits
- Restaurant Management Diploma—30 credits

What You Will Learn

MCTC's Restaurant Management Program prepares you in all facets of running a restaurant operation and helps you to develop a full understanding of the elements necessary to be a successful leader in the restaurant industry through exploring both front-of-the-house and back-of-the-house functions.

You will receive instruction on culinary fundamentals, purchasing and receiving products, and analyzing food, beverage and cost controls. Coursework will also include a focus on supervision, accounting, marketing and management. Upon completion of the program, you will be ServSafe Sanitation and ServSafe Alcohol certified. The Restaurant Management Program also includes a 160-hour required internship and a capstone course that develops your efolio to display your experience for future employers or to assist in your transfer to a four-year university.

You will receive extensive hands-on training in MCTC's cooking labs and in the student-operated dining room which is open to the public. You will also have the opportunity to participate in numerous community service events wherein you can apply your culinary and supervisory expertise.

To successfully participate in the program, you must be able to lift 25 pounds, have the endurance to stand for several hours at a time and have good eye-hand coordination. All students must purchase uniforms, knife and baking kits, and textbooks, as well as cover field trip costs.

Where You Could Work

- Restaurants
- Hotels
- Resorts
- Cruise ships
- Hospital and healthcare centers
- Institutions and companies with food service

Restaurant Management A.A.S. Degree

Credits: 60

Course #	Course Name	Credits
CULA 1005	Culinary Fundamentals.	5.00
REST 1000	Restaurant Business Management.	3.00
CULA 1109	ServSafe Sanitation	2.00
ENGL 1110	College English	3.00
SPCH 1012	Intercultural Communication.	3.00
CULA 1120	Casual Restaurant Operations.	5.00
REST 1100	Food, Beverage and Cost Controls	3.00
CULA 1115	Hospitality Supervisory Management.	3.00
CULA 1105	Food Service Purchasing and Receiving	2.00
ECON 2000	Principles of Macroeconomics	3.00
CULA 2505	Menu Planning	2.00
CULA 2500	Beverage Management	3.00
REST 2000	Hospitality Marketing Management.	3.00
BUSN 2202	Financial Accounting	4.00
BUSN 2252	Principles of Management	4.00
REST 2200	Restaurant Management Internship.	4.00
REST 2100	Restaurant Management Capstone.	2.00
General Education Courses.		6.00

General Education Courses (15 credits)

To complete the Restaurant Management A.A.S. Degree, students are required to successfully complete six credits of general education coursework. This coursework must be selected from at least two MnTC goal areas. A minimum of six credits must be completed from Goal Area 1 and three credits from Goal Areas 5 and 8. An additional six credits must be selected.

Note: ENGL 1110 and SPCH 1012 satisfy Goal Area 1.
ECON 2000 satisfies Goal Areas 5 and 6.

Restaurant Management Diploma

Credits: 30

Course #	Course Name	Credits
REST 1000	Restaurant Business Management.	3.00
CULA 1109	ServSafe Sanitation	2.00
SPCH 1012	Intercultural Communication.	3.00
REST 1100	Food, Beverage and Cost Controls	3.00
CULA 1115	Hospitality Supervisory Management.	3.00
CULA 1105	Food Service Purchasing and Receiving	2.00
CULA 2500	Beverage Management	3.00
BUSN 2202	Financial Accounting	4.00
REST 2000	Restaurant Management Internship.	4.00

General Education Courses (3 credits)

To complete the Restaurant Management Diploma, students are required to successfully complete three credits of general education coursework. A minimum of three credits must be completed from Goal Area 1.

Note: SPCH 1012 satisfies Goal Area 1.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Sound Arts

- Sound Arts A.S. Degree—64 credits

What You Will Learn

MCTC's Sound Arts program will teach you to artistically produce and create quality sound, using the most current high-tech equipment and computer software available.

The core of the program—the first of its kind in the Midwest—is a series of five comprehensive sound arts courses encompassing the physics of sound, analog and digital theory, and artistic form. MCTC's experienced faculty also will provide extensive hands-on training, teaching you to operate electronic and digital equipment and encouraging you to develop your own creative vision. You will broaden your knowledge by studying sound arts history and literature, music theory and design, and the business of sound arts.

The program will help you master the specific procedures for recording, manipulating and mixing sound in a studio. You will even learn how to design your own studio for professional work in music or sound design. In addition, you will learn to adapt to change and train yourself on new equipment and technologies as they appear.

You will have the opportunity to work individually and in groups to complete projects involving music, dialogue, and sound effects and learn to tie sound projects to video and film. In addition, you will put your new skills to work in an internship in the sound industry. For a final project, you will produce a portfolio of small and large works mastered to a compact disk.

All students in the program will need to purchase media materials such as recording tape and jump drives during the course of the program.

MCTC has an articulation agreement with Metropolitan State University.

Where You Could Work

- Recording and postproduction studios
- Location recording companies
- Video and film location and studios
- Radio stations
- Commercial music houses
- Nightclubs and touring productions
- Web design firms
- Self-employment (self-run studios and production companies)

How You Apply

To apply to this program, students must submit an MCTC General Application. Initial course enrollment is determined to allow equitable admission according to specific criteria. See Admissions for details and a projected open seat date for the initial course.

Students are accepted into this program for fall and spring semesters only.

Production SNDA courses are not available for auditing.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0200 or ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Writing:** To enroll in these program courses, students must have successfully completed ENGL 0900 or ESOL 0051 or be declared ready to enroll in ENGL 1110 on the basis of their writing placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement test scores.

In addition, students must demonstrate computer literacy skills by passing the College's computer literacy exam or successfully completing one of the following courses: COML 1000, COML 1100, BTEC 1010, ITEC 1100 or CSCI 1100.

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Sound Arts A.S. Degree

Credits: 64

Introductory Courses

(Listed below are required courses we suggest students choose from during their first semester in this program.)

Course #	Course Name	Credits
MUSC 1150	Fundamentals of Music*	3.00
SNDA 1310	Sound Arts 1: The Nature and Control of Sound	3.00
General Education Courses (see below)		6.00
Elective Courses (see below)		3.00

Advanced Courses

(Listed below are additional courses required for completion of this program.)

Course #	Course Name	Credits
MUSC 1160	Music Theory and Design	3.00
SNDA 1320	Sound Arts 2: Advanced Recording and Sync	3.00
SNDA 1360	Sound Arts History and Literature	3.00
SNDA 2330	Sound Arts 3: Advanced Digital Sound and Music	4.00
SNDA 2340	Sound Arts 4: Form and Design	3.00
SNDA 2350	Sound Arts 5: Final Project	3.00
SNDA 2370	Project Studio Design	3.00
SNDA 2380	Internship	3.00
SNDA 2390	Sound Arts as Business	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

General Education Courses (30 credits)

Sound Arts A.S. degree students are required to complete a minimum of 30 credits of general education coursework. Within this total, ENGL 1110 and ENGL 1111 are required and satisfy a three credit Goal Area 1 requirement. MUSC 1150 and 1160 are also required and are Goal Area 6 courses. Of the remaining 18 credits, at least three credits must be from selected from courses in Goal Areas 7, 8, 9 or 10.

Elective Courses

Select one course from the following:

Course #	Course Name	Credits
CIST 1102	Cinema History 2	3.00
MUSC 1000	Introduction to Music	3.00
MUSC 1010	American Popular Music 1	3.00
MUSC 1020	American Popular Music 2: The History and Development of Rock 'n' Roll	3.00

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Theatre Arts

- A.F.A Degree in Theatre Arts—60 credits

What You Will Learn

MCTC's A.F.A. in Theatre Arts will give you training in the basic skills necessary for creative expression in the performance and technical aspects of the theatre arts, and, if you choose, provide you with the ability to transfer to a B.A. or B.F.A. degree in Theatre. It will also qualify you for the first half of a cooperative B.A. degree in Theatre Arts with Metropolitan State University, the only state college or university outside of the University of Minnesota to offer a B.A. degree in Theatre Arts in the Twin Cities.

The program integrates the artistic, technical and academic disciplines of theatre practice. You may choose an emphasis in acting, directing or technical theatre skills. You will also learn to interpret and understand global theatre history, as well as contemporary and classical dramatic literature.

Your instructors will be theatre artists with professional experience and graduate degrees in theatre. Their classes focus on developing the fundamentals of acting, stage movement, vocal production, play directing and producing, scene design and lighting, playwriting, and written and oral response to theatre.

The Theatre Department's stage productions will serve as your learning laboratory, an opportunity to enter into creative collaborations with faculty, community members and artists-in-residence. You may find yourself acting, directing, designing or viewing productions at any given time to learn all aspects of the theatre experience, from lab theatre to the mainstage. The productions and your coursework combine to give you a solid base in classical, modern, contemporary and multicultural theatre.

The program has cross-disciplinary connections with Cinema, Art, Music, English and various Humanities disciplines.

Where You Could Work

- Local, regional and national theatre companies
- Music, dance and opera companies
- Local and regional TV production
- Local and regional film production
- Local and regional commercial production houses
- Live events production agencies

Theatre Arts A.F.A. Degree

Credits: 60

Required Core Courses

Course #	Course Name	Credits
THTR 1104	Introduction to Acting 1	3.00
THTR 1131	Introduction to Theatre	3.00
THTR 1145	Stagecraft: Scene Design and Lighting.	3.00
THTR 2105	Introduction to Acting 2	3.00
THTR 2145	Introduction to Directing.	3.00
THTR 2150	Theatre History 1.	3.00
THTR 2160	Theatre Capstone	2.00

Theatre Credits in A.F.A. in Theatre Arts	20.00
Remaining credits are the complete Minnesota Transfer Curriculum.	40.00

Visual Arts

- A.F.A. Degree in Visual Arts—60 credits

What You Will Learn

MCTC's Associate of Fine Arts (A.F.A.) Degree in Visual Arts is a combination of liberal arts general education courses and foundation courses in Art and Art History. The A.F.A. offers you an opportunity to think seriously about a career in visual art making. You will complete the degree with a portfolio to prepare you for transfer to a four-year baccalaureate program in Fine Arts (B.A. or B.F.A.). Students desiring a two-year AFA degree for job placement or enhancement, as well as those returning to school for enrichment purposes, will also benefit from this degree.

Experienced faculty, practicing artists in their own right, will teach you how to identify formal qualities, demonstrate technical processes, and cultivate investigation of the impact of expression in visual art, as well as create art in a wide variety of mediums. Your coursework will cover art and art history from all over the world and across time periods. Additionally, core courses in design, drawing, painting, ceramics, photography, and sculpture lead students to more advanced study and creation in those areas, as well as watercolor, printmaking and direct metal sculpture. You will complete your degree with a portfolio presentation, for which you will select a body of work that has visual or thematic continuity and represents the culmination of your A.F.A. studies. You will install an exhibition of the results of that study. The exhibition will be accompanied by a written artist's statement, all in preparation for an advanced degree.

Visual Arts A.F.A. Degree

Credits 61

Core Courses (6 courses required)

Course #	Course Name	Credits
ARTS 1121	Drawing I	3.00
ARTS 1125	Ceramics I	3.00
ARTS 1133	Sculpture	3.00
ARTS 1141	Design: Foundations of Studio Art	3.00
ARTS 1142	Painting I	3.00
PHOT 1100	Photography I	3.00

Art History (1 course required)

Course #	Course Name	Credits
ARTS 1111	Art History: Ancient to Medieval	3.00
ARTS 1112	Art History: Renaissance to 18th Century	3.00
ARTS 1113	Art History: Modern to Contemporary.	3.00
ARTS 2211	Women in Art	3.00

Additional Studio Courses (3 courses required)

Course #	Course Name	Credits
ARTS 1132	Printmaking.	3.00
ARTS 2212	Painting 2	3.00
ARTS 2213	Watercolor.	3.00
ARTS 2221	Life Drawing	3.00
ARTS 2222	Drawing 2	3.00
ARTS 2225	Ceramics 2.	3.00
ARTS 2233	Sculpture: Direct Metals	3.00
PHOT 1200	Photography 2.	3.00

Portfolio Preparation

Course #	Course Name	Credits
ARTS 2214	A.F.A. Portfolio	2.00

Fine Arts Credits in A.F.A. Degree in Visual Arts Credits: 32

General Education Courses

ENGL 1110: College Writing 1
 ENGL 1111: College Writing 2
 SPCH: any MnTC Goal Area 1 Speech Communication course
 INFS 1000: Information Literacy and Research Skills

Goal Area 3: Natural Sciences
 Any course from Goal Area 3.

Goal Area 4: Mathematics/Logical Reasoning
 Any course from Goal Area 4.

Goal Area 5: History and the Social and Behavioral Sciences
 Any course from Goal Area 5.

Goal Area 6: Humanities and Fine Arts
 Any two courses from Goal Area 6 that are NOT in ARTS and PHOT.

Any one course from either Goal Areas 7, 9 or 10 that is NOT also in Goal Area 6.

General Education Credits in Associate of Fine Arts Degree: 28

Total Degree Credits: 60

This catalog is for informational purposes only and does not constitute a contract. The college makes every effort to ensure that this catalog contains complete and accurate information at the time of printing. However, circumstances may arise that require the college to change existing policies, rules or program information prior to the printing of the next catalog. The college reserves the right to change, modify, or alter any information in this catalog.

Welding and Metal Fabrication

- Welding and Metal Fabrication Certificate—30 credits

What You Will Learn

MCTC's Welding and Metal Fabrication program will provide you with the technical knowledge and hands-on skills you need to gain entry level employment with manufacturing plants and various other industries.

This program will introduce you to current welding and metal fabrication processes widely used in a great variety of work environments. Throughout the program, you will receive practical information on how metal fabrication processes work. Then, you will apply that knowledge in a hands-on environment by utilizing welding and metal fabrication equipment. By examining your projects with the instructor, you will begin to develop a skill and knowledge base that will be useful in shops and at work sites.

In addition, you will learn about shop safety and safe work practices, blueprint reading, applied math, and general fabrication methods.

To participate in the program, you should be in good physical health and possess stamina, be able to lift 50 pounds, and have good eye-hand coordination and manual dexterity.

With additional education and training, you may advance to more skilled jobs in the manufacturing and construction fields or open your own shop. Welding courses are also valuable for persons who have careers or interests that require some welding knowledge.

MCTC has an articulation agreement with the Welding Program at Saint Paul College.

For more information, contact the program faculty coordinator, Todd Bridigum, at 612-659-6054.

MCTC's Welding and Metal Fabrication program is a member college of 360°, a Minnesota State Colleges and Universities Center of Excellence in Manufacturing and Applied Technology. Visit their website at www.360mn.org for more information on career ladder programs offered by 360° colleges and Bemidji State University.

Where You Could Work

- Industrial fabrication and repair shops
- Custom job shops
- Medical/Pharmaceutical industry
- Food machinery and equipment manufacturers
- Aircraft, automobile, trucking and shipbuilding industries
- Construction sites

Students are accepted into this program in fall semester only.

Requirements for fall admission:

Students must meet admission requirements, or they may be accepted into the program if enrolled in MATH 0060, concurrently with enrollment in: WELD 1000, WELD 1050, WELD 1100, WELD 1150. Instructor will work with students enrolled in MATH 0060 in accommodating class schedules that pose a time conflict.

Requirements for spring admission:

Students must meet admission requirements and register for the following courses: WELD 2050, WELD 2100, WELD 2150 and WELD 2200.

Courses in this program require achievement of the following program admission requirements:

- **Reading:** To enroll in these program courses, students must have successfully completed READ 0100 or completion of ESOL 0042 or placement into ESOL 0052 or be declared ready to enroll in READ 1300 on the basis of their reading placement test scores.
- **Math:** To enroll in these program courses, students must have successfully completed MATH 0060 or be declared ready to enroll in MATH 0070 on the basis of their math placement scores.

Welding and Metal Fabrication Certificate

Credits: 30

First Semester

Course #	Course Name	Credits
WELD 1000	Applied Shop Mathematics and Measuring Devices	3.00
WELD 1050	Oxy/Acetylene Welding, Brazing and Cutting	3.00
WELD 1100	Shielded Metal Arc Welding	3.00
WELD 1150	Blueprint Reading and Welding Symbols	3.00
General Education Credits (see below)		3.00

Second Semester

Course #	Course Name	Credits
WELD 2000	Layout (Volumes) and Fixture	2.00
WELD 2050	Gas Metal Arc Welding	3.00
WELD 2100	Flux Core Arc Welding	2.00
WELD 2150	Gas Tungsten Arc Welding—DC Applications	3.00
WELD 2200	Gas Tungsten Arc Welding—AC Applications	2.00
WELD 2500	Fabrication Shop/ Equipment	3.00

General Education Courses (3 credits)

To complete the Welding and Metal Fabrication Certificate, you are required to successfully complete three credits of general education coursework from the MnTC Goal Area 1.

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.

Women's Studies

- Women's Studies Certificate—18 credits

What You Will Learn

MCTC's Women's Studies program will help you examine the world from the perspectives of ethnically diverse women and become an agent of positive change for women and their communities.

Your coursework will be feminist in context and philosophy, as courses are designed to value and affirm cultural diversity, widen women's access to the institutions in a democratic society, and empower women to become leaders in building strong communities.

You will learn to use research to obtain the information you need—whether related to politics or the arts. For instance, you will be trained to use the Internet to access social science and women's studies resources, such as the Wellesley Center for Women's Research and the *National Women's Studies Journal*. You also will learn to track the work of a U.S. congresswoman or U.S. senator to study her professional preparation for Congress, as well as her demonstrations of leadership, ideas and proposed legislation. Plus, you will be able to identify contemporary women artists performing lectures, plays and/or art shows in the local community.

During the program, you will have several service learning opportunities in the women's service community and have the chance to participate with faculty and other students in the International Women's Day Conference at the University of Minnesota.

The Women's Studies program will expose you to one class in each of the liberal arts and fulfill elective requirements in several degree programs.

MCTC has an articulation agreement with Metropolitan State University. In addition, the Women's Studies counselor will help nontraditional students apply for transfer scholarships at specified private and public colleges.

Where You Could Work

- Environment and health resource centers such as Women's Cancer Resource Center, Melpomene, and the Institute for Agriculture and Trade
- Social service centers such as Harriet Tubman Women's Shelter and the Sexual Violence Center
- Advocacy groups such as Minnesota Advocates for Human Rights
- Cultural resource organizations such as Black, Indian, Hispanic and Asian Women in Action; the Indian Women's Resource Center

Women's Studies Certificate

Credits: 18

Required Course

Course #	Course Name	Credits
WOST 1101	Introduction to Women's Studies	3.00

Additional Courses

The 15 remaining credits must be chosen from at least three of the following four MnTC goal areas and electives areas:

Goal 3: Natural Sciences

Course #	Course Name	Credits
BIOL 1160	Biology of Women	3.00

Goal 5: History and the Social and Behavioral Sciences

Course #	Course Name	Credits
ANTH 1150	Women in Cross-Cultural Perspective.	3.00
HIST 2241	Women in Early America, 1500–1865.	3.00
HIST 2242	Women in Modern America, 1865 to the Present	3.00
SOCI 1170	Women in a Global Perspective.	3.00
WOST 1120	Introduction to Lesbian Cultures	3.00

Goal 6: Humanities and Fine Arts

Course #	Course Name	Credits
ARTS 2211	Women in Art	3.00
ENGL 1158	Women's Literature	3.00
WOST 1140	Women's Culture	3.00
WOST 1150	Images of Women in Contemporary Literature	3.00
WOST 2200	View of Modern Women	3.00
WOST 2211	Women's Response to Violence.	3.00
WOST 2212	Ecofeminism	3.00
WOST 2213	Empowerment and Women.	3.00
WOST 2235	Women Poets of the World	3.00

Electives

Course #	Course Name	Credits
BUSN 1166	Women in Leadership and Management	3.00
READ 2200	Topics in Advanced Critical Reading	3.00

First semester courses will generally be selected with the assistance of a counselor or advisor during Orientation. Students are encouraged to visit with a counselor or advisor for planning beyond the first semester in the program.



Course Descriptions

Academic Development

ADEV 1000: Orientation to Higher Education

2.00 credits (2.00 lec)

This course provides you with specific skills needed to accomplish your academic and personal goals. Through lecture, discussion, group exercises, videos and self-reflection, you are introduced to a variety of topics critical to your success. These topics include, but are not limited to, learning styles, time management, test taking, critical thinking, diversity relationships and money management.

Prerequisites: Students must be enrolled in Starting Point.

ADEV 1010: Career Planning

2.00 credits (2.00 lec)

This course examines interests, values, skills and personality styles and how they relate to the selection of a career and/or academic major. You will review occupational and educational information in order to determine which career/major path is appropriate for you and establish specific goals related to your choice of career and/or major. You will explore the job search process and engage in activities such as résumé writing and mock interviewing, which will help prepare you for your eventual job search and/or transfer to a four-year college or university.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into ENGL 0900 or ESOL 0051 or completion of ESOL 0041; placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042.

ADEV 1015: ESOL Strategies for College Success

2.00 credits (2.00 lec)

This course provides English speakers of other languages (ESOL) with specific skills needed to accomplish their academic and personal goals. Through lectures, discussion, group exercises, videos and career exploration activities, you are introduced to a variety of topics necessary for success in school and employment. These topics include, but are not limited to: organizational techniques, time management, note taking, critical thinking, test-taking strategies and learning styles.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into ESOL 0031.

ADEV 1100: Strategies for College Success

2.00 credits (2.00 lec)

This course is designed to increase your success in college by assisting you in obtaining skills necessary to reach your educational objectives. Topics include college requirements and expectations, academic and career goal-setting, time planning, stress management, communication skills, learning styles, and an overview of study skills.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into ENGL 0900 or ESOL 0051.

ADEV 1130: Becoming Assertive

1.00 credit (1.00 lec)

In this course, you will learn how to be assertive in your daily life without infringing on the rights of others. Appropriate techniques for expressing points of view, disagreeing and confronting conflict will be discussed. If interested in career fields such as nursing, human services and addiction counseling, you may find this course helpful, as will liberal arts students who wish to improve their communication skills.

ADEV 1150: Career and Academic Strategies

1.00 credit (1.00 lec)

This course explores interests, skills, values and abilities as they relate to different careers and majors. You will establish specific goals related to your career and/or major choice.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into ENGL 0900 or ESOL 0051 or completion of ESOL 0041; placement into READ 0200 or ESOL 0052 or completion of ESOL 0042.

ADEV 1180: Thinking Skills for Solving Personal Problems

1.00 credit (1.00 lec)

In this course, you will learn strategies to overcome problems you face in daily life. Personal responsibility is acknowledged, and skills such as positive self-talk, realistic attribution of causes and predicting right rewards are stressed.

ADEV 2998: Directed Study

Prerequisites: One course in ADEV.

Accounting

ACCT 1215: Accounting Cycle

1.00 credits (1.00 lab)

This course provides an understanding of the basic accounting cycle. You will learn to apply debits and credits, do transaction analysis, record transactions in the general journal, post to the general ledger, and record adjusting and closing entries. You will also learn to work with subsidiary ledgers and special journals.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 1222: Business Math

3.00 credits (2.00 lec/1.00 lab)

This course provides you with an introduction to the study of business mathematics. You will apply mathematics concepts to commonly occurring business-related situations, including calculation of commissions, payroll taxes, and compound interest. You will also gain proficiency in the use of a 10-key pad.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 1230: Payroll Accounting

3.00 credits (3.00 lec)

This course covers the various state and federal laws pertaining to the computation and payment of salaries and wages. Topics include preparation of employment records, payroll time cards, payroll register, employee earnings records, and state and federal reports.

Prerequisite: BUSN 2202; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 1261: Spreadsheets for Accounting

4.00 credits (3.00 lec/1.00 lab)

This course provides an in-depth exposure to the current version of Microsoft Excel. You will learn the basic tools of Microsoft Excel. You will then apply those tools to typical business situations. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 1270: Computerized Accounting — QuickBooks

2.00 credits (2.00 lab)

This course combines basic accounting concepts with key software skills supported in Quickbooks Accounting. Must be taken A–F.

Prerequisite: BUSN 2202.

ACCT 1272: Computerized Accounting — Peachtree

2.00 credits (2.00 lab)

This course combines basic accounting concepts with key software skills supported in Peachtree Accounting.

Prerequisite: BUSN 2202.

ACCT 1280: Income Tax

3.00 credits (2.00 lec/1.00 lab)

This course provides an explanation and interpretation of the Internal Revenue Code as it applies to individual income tax returns. You will have opportunities to prepare income tax returns.

Prerequisite: BUSN 2202.

ACCT 2230: Intermediate Accounting 1

4.00 credits (4.00 lec)

This course is an advanced study of accounting theory and concepts, including analysis and practical application of the influences on financial accounting by various policy-making boards and governmental agencies. Topics include the income statement, balance sheet, statement of cash flows, assets and liabilities.

Prerequisite: BUSN 2202; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 2240: Intermediate Accounting 2

4.00 credits (4.00 lec)

This course is a continuation of the comprehensive study of accounting theory and concepts. Topics include owners' equity, revenue recognition concepts, changes in price levels and financial statement analysis.

Prerequisites: ACCT 2230; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 2252: Accounting Internship

2.00 credits (2.00 int)

This course provides you with actual work experience in an accounting position. A competency-based training plan will be developed for each student.

Prerequisites: BUSN 2202 and instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ACCT 2295: Accounting Technical Review

2.00 credits (2.00 lab)

This is a capstone course. You will complete a comprehensive practice to demonstrate the accounting knowledge and computer skills that you have learned in the Accounting Technician program. Must be taken A–F.

Prerequisites: ACCT 1261.

Prerequisites/Corequisites: ACCT 2230.

ACCT 2998: Directed Study

Prerequisites: One course in ACCT; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Addiction Counseling

COUN 1500: Drugs in the Community

3.00 credits (3.00 lec) (3.00 credits online)

This course is designed to acquaint you with the physiological, psychological and sociological aspects of commonly abused drugs in the community. Topics include: drugs of abuse (marijuana, alcohol, cocaine, etc.); substance abuse among people in the community (youth, ethnic and cultural groups); and substance abuse services (prevention, treatment, drugs and law enforcement). This is a nonprogram course that is offered for the general student body.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

COUN 2510: Introduction to Addictionology

3.00 credits (3.00 lec)

This course acquaints you with what addiction counselors experience both personally and professionally. Ethics, licensure and the 12 core functions of a counselor are discussed. The course focuses on gaining a working knowledge of predominant professional approaches to addiction. Historic approaches, Jellinek theory and the disease concept are critically reviewed. It also examines similarities of many types of harmful dependencies and stresses differences and parallels among various approaches to their treatment. Discussion and writing assignments allow you to further develop critical thinking skills. If taking only one COUN course, you must begin with COUN 2510. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

COUN 2520: Psychopharmacology

3.00 credits (3.00 lec)

This course will acquaint you with psychoactive drug classifications and with the physiological, biochemical, and psychological effects of mind-altering drugs. This course describes the characteristics of several types of mental illness, how they co-vary with chemical dependency, and how education and counseling techniques are used in treatment. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

COUN 2530: Counseling Skills

3.00 credits (3.00 lec)

You will learn basic microcounseling skills, such as attending, active listening and attention to nonverbal communication. You will also examine values and ethics related to counseling. The course will focus on the theories and techniques of psychodynamic, humanistic, cognitive-behavioral and family counseling. You will practice skills and techniques associated with these types of counseling. The applicability to chemical dependency clients and treatment will be discussed. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: COUN 2520.

COUN 2620: Assessment and Interviewing

3.00 credits (3.00 lec)

This course teaches the skills of chemical health assessment and referral. You will learn appropriate interviewing techniques, data collection, and diagnostic and referral procedures. Several assessment tools are reviewed along with “Rule 25” and DSM-IV criteria. You will practice advanced counseling skills and motivational interviewing techniques. This course meets the 30-hour state requirement for “Rule 25” training. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: COUN 2520.

COUN 2630: Case Management and Legal and Ethical Standards

3.00 credits (3.00 lec)

This course is designed to provide you with the knowledge and skills necessary for successful case management as an addiction counseling professional. Topics include: the legal requirements of clinical practice, the major core functions of addiction counseling, cultural factors in clinical practice and ethics for addiction counselors. Must be taken A–F.

Prerequisites: COUN 2510, COUN 2520, COUN 2530; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: COUN 2620.

COUN 2640: Group Counseling

3.00 credits (3.00 lec)

This course teaches the dynamics of group counseling. You will learn the skills of group counseling in a classroom and laboratory experience, as well as learn writing and charting skills necessary to document client progress. Topics include stages of group function, group rules and goals, group leader skills, types of group therapy, etc. You will use group process to demonstrate your readiness to intern and collaborate with faculty on internship planning with the intent of meeting individualized career goals. You will select an appropriate internship site for the following semester. Must be taken A-F.

Prerequisites: COUN 2510, COUN 2520, COUN 2530; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisites/Corequisites: COUN 2620 and COUN 2630.

COUN 2700: Internship 1

9.00 credits (9.00 int)

This internship sequence is intended to provide you with the opportunity to transfer the knowledge gained and skills developed in the academic portion of the Addiction Counseling program into clinical settings. Some emphasis on prevention, education, research and/or administration is also possible. The internships require you to demonstrate competence in the 12 core functions of a counselor and may take place in a variety of agencies. You will collaborate with faculty on internship planning with the intent of meeting individualized career goals. One of the two internships must be at least 440 hours in duration, and the two internships combined should total at least 880 hours. Must be taken pass/fail.

Prerequisites: COUN 2510, COUN 2520, COUN 2530, COUN 2620, COUN 2630, COUN 2640; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051. Clear background check.

Corequisite: COUN 2710.

COUN 2710: Internship Seminar 1

1.00 credit (1.00 lec)

You will meet biweekly on campus for an Internship Seminar. The seminar is run by COUN faculty and provides information not previously covered in coursework. It also provides you with a supportive forum for processing on-site experiences. Must be taken A-F.

Prerequisites: COUN 2510, COUN 2520, COUN 2530, COUN 2620, COUN 2630, COUN 2640; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Corequisite: COUN 2700.

COUN 2800: Internship 2

9.00 credits (9.00 int)

This internship sequence is intended to provide you with the opportunity to transfer the knowledge gained and skills developed in the academic portion of the Addiction Counseling program into clinical settings. Some emphasis on prevention, education, research and/or administration is also possible. The internships require you to demonstrate competence in the 12 core functions of a counselor and may take place in a variety of agencies. One of the two internships must be at least 440 hours in duration, and the two internships combined should total at least 880 hours. Must be taken pass/fail.

Prerequisites: COUN 2700; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051. Clear background check.

Corequisite: COUN 2810.

COUN 2810: Internship Seminar 2

1.00 credit (1.00 lec)

You will meet biweekly on campus for an Internship Seminar. The seminar is run by COUN faculty and provides information not previously covered in coursework. It also provides you with a supportive forum for processing on-site experiences. Must be taken A-F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Corequisite: COUN 2800.

COUN 2998: Directed Study

Prerequisites: One course in COUN and placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Air Traffic Control

ATCT 2000: Introduction to Air Traffic Control

3.00 credits (3.00 lec)

This online course introduces you to Aviation and Air Traffic Control (ATC) and provides you with the basic knowledge of aviation terms and concepts you will need to become an Air Traffic Controller. You will learn the background and history of ATC as well as the development of the ATC system. You also will develop an understanding of the environments of ATC, terminal and en route. You will examine rules, procedures and phraseology used in both environments.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; ENGL 1110; MATH 1110.

ATCT 2100: Introduction to Aviation Weather

3.00 credits (3.00 lec)

This online course introduces you to aviation weather and those points necessary for a basic understanding and application of aviation weather as used by air traffic controllers. You will learn the general characteristics of weather formation. You will also compare several sources of weather information used by controllers and different formats for issuing weather to pilots, learning to encode and decode weather information on each.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; ENGL 1110; MATH 1110.

ATCT 2110: Aviation Knowledge

3.00 credits (3.00 lec)

This course provides an introduction to the basic terminology, definitions, rules and requirements used in aviation. It will cover the fundamental principles of flight and introduce you to the pilot's environment. You will examine various publications pertinent to aviation, including the Aeronautical Information Manual and Federal Aviation Regulations.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; ENGL 1110; MATH 1110.

ATCT 2120: Basic Navigation/Flight Operations

3.00 credits (3.00 lec)

This course examines basic navigation procedures and navigation equipment used in Air Traffic Control. In addition, the course will provide an overview of rules and procedures used by pilots and air traffic controllers in general as well as commercial flight operations.

Prerequisites: ATCT 2000, ATCT 2100, ATCT 2110 and ATCT 2135.

ATCT 2135: Aviation Law: Accident Investigation Analysis and ATC Applications

3.00 credits (3.00 lec)

This online course examines regulatory agencies, FAA enforcement of Federal Aviation Regulations (FARs) and the relationships between the needs of commercial, military and general aviation and their impact on ATC. You will analyze and discuss FARs. You will also analyze accidents that have significance in ATC.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; ENGL 1110; MATH 1110.

ATCT 2310: Principles of En Route Non-Radar Separation

3.00 credits (3.00 lec)

This course explores non-radar separation in the en route ATC environment. You will learn aircraft flight characteristics, navigational aids and airspace used in this unique training environment. You will also examine documentation procedures and the language of ATC, phraseology. You will explore and begin to apply non-radar separation rules and procedures by participating in creative classroom exercises. Must be taken A-F.

Prerequisites: ATCT 2000, ATCT 2100, ATCT 2110 and ATCT 2135.

Corequisite: ATCT 2120.

ATCT 2415: ATC Computers and Flight Data

3.00 credits (1.00 lec/2.00 lab)

This course teaches ATC flight data computers and communication systems used in en route ATC facilities. You will learn to compose and format messages for coordination and documentation of ATC clearances. You will develop an understanding of the actual computers and communication systems used in en route facilities today.

Prerequisites: ATCT 2120 and ATCT 2310.

Corequisites: ATCT 2425 and ATCT 2515.

ATCT 2425: Application of En Route Non-Radar and Introduction to Radar Separation

6.00 credits (2.00 lec/4.00 lab)

This course teaches application of separation procedures in ATC and is divided into two parts, both taught primarily in a realistic simulation lab. In part one of this course, you will learn to apply non-radar separation and procedures. In part two, you will apply rules and procedures to separate aircraft using radar. You will participate in hands-on simulated traffic scenarios. You will also develop effective communication, critical-thinking and problem-solving skills needed in ATC.

Prerequisites: ATCT 2120 and ATCT 2310.

Corequisites: ATCT 2415 and ATCT 2515.

ATCT 2445: Human Factors in ATC

3.00 credits (2.00 lec/1 lab)

This course teaches advanced human factors as they relate to air traffic control. You will learn teamwork, effective communication skills, situational awareness, and efficient workload management in classroom and air traffic control lab settings.

Prerequisites: ATCT 2415 and ATCT 2425 and ATCT 2515.

Corequisite: ATCT 2500.

ATCT 2500: Advanced Radar and Radar Associate Application

9.00 credits (2.00 lec/7.00 lab)

This course will teach advanced non-radar, radar and radar associate procedures in a simulated environment. You will learn to perfect separation of aircraft in departure, en route, arrival stages of flight. You will also learn advanced application of board management, phraseology, vectoring, traffic advisories, emergency procedures, instrument and visual approaches, handoffs and point outs in a realistic lab setting.

Prerequisites: ATCT 2415 and ATCT 2425 and ATCT 2515.

Corequisite: ATCT 2445.

ATCT 2515: ATC Career Preparation

3.00 credits (3.00 lec)

This course examines how one becomes an air traffic controller with the Federal Aviation Administration (FAA). You will explore qualifications needed in the hiring processes. You will learn the application process, interviewing skills and practical aspects of ATC. You will also learn and practice testing techniques to help you prepare for both the civil service exam and the FAA's comprehensive review exam.

Prerequisites: ATCT 2120 and ATCT 2310.

Corequisites: ATCT 2415 and ATCT 2425.

Aircraft Technician

AMTA 1200: Nonmetallic Structures

4.00 credits (2.00 lec/2.00 lab)

You will take a hands-on approach in this course, working with a variety of nonmetallic materials for aircraft painting and finishing. You will learn about a variety of aircraft applications, including plastic, fiberglass, honeycomb and composite constructions.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 1209: Sheet Metal Structures

5.00 credits (2.00 lec/3.00 lab)

This course covers basic sheet metal structures and their repair. You will learn to use fasteners and tools to make repairs caused by stresses and loads.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 1214: Aircraft Welding

1.00 credit (1.00 lab)

This course gives you the ability to recognize acceptable welds.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 1236: Airframe Inspection

2.00 credits (1.00 lec/1.00 lab)

In this course, you will learn to inspect, service and maintain an aircraft in order to keep it in airworthy condition.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 1244: Assembly and Rigging

2.00 credits (1.00 lec/1.00 lab)

In this course, you will gain knowledge and experience for in-flight aircraft on both fixed and rotary wing aircraft. By integrating the theory of nomenclature and rigging procedures, you will also learn about the effects of flight control systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 2316: Hydraulics and Pneumatics

2.00 credits (1.00 lec/1.00 lab)

This course covers hydraulic systems and pneumatic systems, system components, system operation and servicing. You will learn the basic principles of hydraulics and how to perform maintenance work on hydraulic and pneumatic systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 2321: Landing Gear Systems

2.00 credits (1.00 lec/1.00 lab)

This course provides the knowledge and skills necessary to properly inspect, check, service, and repair landing gear retraction systems, shocks, struts, brakes, wheels, tires and steering systems. This course also introduces you to the operations and purposes of position and warning systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 2324: Environmental Systems

3.00 credits (2.00 lec/1.00 lab)

This course covers the theory and maintenance of aircraft interior and exterior environmental systems, including pressurization, air conditioning, heaters, supplemental oxygen systems, ice prevention and rain removal systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 2329: A.C. Electrical Equipment

3.00 credits (2.00 lec/1.00 lab)

This course covers the theory, operation, minor maintenance, and inspection of aircraft communication and navigational systems, with emphasis on installation and inspection of radios and antennas. You will learn the basics of A.C. electricity, A.C. meters and measurements, solid-state devices, capacitors, inductors, transformers, and A.C. circuits.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTA 2998: Directed Study

Prerequisites: One course in AMTA; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 1100: Introduction to Aviation Maintenance

3.00 credits (2.00 lec/1.00 lab)

You will review programs, policies, procedures, and publications in aircraft maintenance technology.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 1111: Materials and Processes

4.00 credits (2.00 lec/2.00 lab)

This class covers hardware, materials, and hand tools used in the construction, repair, and maintenance of aircraft, including metal alloys and their heat treatment.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 1121: Weight and Balance

2.00 credits (1.00 lec/1.00 lab)

In this course, you will learn to weigh an aircraft, calculate empty weight, and perform Empty Weight Center of Gravity calculations and record-keeping.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 1122: Aircraft Drawing

1.00 credit (1.00 lab)

This course covers basic drawing knowledge, practices, and application to help you understand and create basic drawings and sketches.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 1125: Basic D.C. Electricity

4.00 credits (3.00 lec/1.00 lab)

This course covers the basics of D.C. circuits, Ohm's Law, and multimeters and their use. You will learn to maintain, install, and remove both the lead-acid and ni-cad batteries used in current aircraft.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTG 2998: Directed Study

Prerequisites: One course in AMTG; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2151: Reciprocating Engines

6.00 credits (3.00 lec/3.00 lab)

This course provides learning opportunities that enable you to gain a thorough knowledge of reciprocating engine types, construction, nomenclature, operating principles, component inspections, and manufacturers' overhaul procedures and requirements.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2159: Turbine Engines

6.00 credits (3.00 lec/3.00 lab)

This course covers the fundamentals of aircraft gas turbine engines, including the theory, design, construction, operating principles, inspection and maintenance fundamentals of aircraft gas turbine engines. It will also cover overhaul, removal and installation, troubleshooting techniques, and the maintenance fundamentals of aircraft gas turbine engines.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2190: Powerplant Inspection

3.00 credits (1.00 lec/2.00 lab)

This course provides training and practice in the procedures and techniques of powerplant inspections.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2266: Powerplant Systems

2.00 credits (1.00 lec/1.00 lab)

This course enables you to gain a thorough knowledge of induction, cooling, lubricating, and exhaust systems for both reciprocating and turbine engines, including engine turbocharging theory and maintenance.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2270: Ignition Systems

3.00 credits (1.00 lec/2.00 lab)

This course covers ignition systems on reciprocating and turbine power plants. Attention is given to the requirements, design, and operation of magnetos and capacitor discharge ignition. Experience is provided in inspection, timing, repair and troubleshooting of the systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2274: Fuel Metering

3.00 credits (1.00 lec/2.00 lab)

This course is a study of the various types of devices used to properly introduce fuel into the engine. The material includes fundamentals, servicing and adjustments. Both reciprocating and gas turbine engines are covered.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2282: Propellers

2.00 credits (1.00 lec/1.00 lab)

This course provides you with the necessary technical knowledge and mechanical skills needed to remove, check, inspect, troubleshoot, repair and/or service various types of aircraft propellers.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTP 2998: Directed Study

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTR 2207: Electrical Systems and Troubleshooting

5.00 credits (3.00 lec/2.00 lab)

This course covers electrical systems, which generate, distribute and utilize electricity in various aircraft applications. You will also learn the basic troubleshooting of electrical circuits and electrical systems as found on aircraft.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTR 2300: Fire Protection Systems

1.00 credit (1.00 lec)

This course covers the principles of operation and maintenance of airframe and power plant fire detection and protection systems.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTR 2302: Fuel Systems

1.00 credit (1.00 lec)

This course covers aircraft fuel system components, operation, inspection, adjustments and servicing.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTR 2304: Instrument Systems

2.00 credits (1.00 lec/1.00 lab)

This course covers the theory, operation, minor maintenance, and inspection of aircraft instruments, with emphasis on installation and inspection.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

AMTR 2998: Directed Study

Prerequisites: One course in AMTR; Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

American Indian Studies

AMIS 1000: Native America

3.00 credits (3.00 lec)

This course is an introduction to the history of Native Americans from the pre-Colombian period to the present, with special emphasis on Native Americans in Minnesota. You will study the subject through oral history, personal history, memoirs, speeches and tribal history. The course will focus on the history of one reservation, as well as international history, government policies and pan-Indian experiences.

Fulfills MnTC Goal Areas 5 and 7.

AMIS 1100: Native American Literature

3.00 credits (3.00 lec)

This course is an introduction to the traditional and contemporary literature of Native American authors. The focus is both international and regional. You will study both oral and written literature. Storytelling, myths, legends, rituals, prayers, chants, songs, speeches, humor, fiction, poetry, drama and nonfiction essays are all a part of this course.

Fulfills MnTC Goal Areas 6 and 7.

AMIS 1120: Community Development and Indigenous Cultures

3.00 credits (3.00 lec)

In this course, you will be introduced to the concept of community from indigenous perspectives through non-profit organizations, private consulting firms, advocacy groups and government. You will examine the interconnected political, economic, and physical environments of social and cultural groups that maintain an identity, with a focus on Native American reservation and off-reservation communities. This course will include a service learning component with a community different from your own.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; or instructor approval.

AMIS 1200: Native American Art and Art History

3.00 credits (3.00 lec)

This course is an overview of Native American art and art history before and after contact with Europeans. Through slide shows, lectures and guest speakers, you will study tribal art ranging from Meso-American to Inuit. You will also create and critique art projects.

Fulfills MnTC Goal Areas 6 and 7.

AMIS 1300: Native Americans in Cinema and Popular Culture

3.00 credits (3.00 lec)

This course is a survey of the representation of Native peoples in cinema, television and popular culture. You will examine the presentation of Native peoples in classic and popular films. You will critique the accuracy of cultural depiction, the evolution of past and present stereotypes, and discuss trends in current media.

Fulfills MnTC Goal Areas 6 and 7.

AMIS 1400: Ojibwe 1

4.00 credits (4.00 lec)

This course is an introduction to the Ojibwe language, a spoken language of Minnesotan tribes and those of the north central region of North America. You will learn basic communication skills that will prepare you for further study and application. The vocabulary centers on everyday themes and seasonal life. You will also learn language in the context of culture and real-life situations.

Fulfills MnTC Goal Area 8.

AMIS 1500: Ojibwe 2

4.00 credits (4.00 lec)

The course is a continuation of Ojibwe 1. You will further develop communication skills to prepare them for further study and application. The vocabulary centers on everyday themes and seasonal life. You will learn the language in the context of culture and real-life situations, incorporating more complex grammatical structures, as well as engage in more reading and writing activities.

Prerequisites: AMIS 1400.

Fulfills MnTC Goal Area 8.

American Sign Language

AMSL 1000: American Sign Language 1

3.00 credits (3.00 lec)

This course is an introduction to American Sign Language (ASL), a visual/gestural language used by Deaf people. You will learn sign vocabulary, grammar and about Deaf culture.

Fulfills MnTC Goal Area 8.

AMSL 1100: American Sign Language 2

3.00 credits (3.00 lec)

This course is an extension of ASL 1. You will learn new vocabulary and grammar, and develop better expressive and receptive skills.

Fulfills MnTC Goal Area 8.

Prerequisites: AMSL 1000.

AMSL 2998: Directed Study

Prerequisites: One course in AMSL.

American Studies

AMST 1000: American Radicalism

3.00 credits (3.00 lec)

This course surveys the evolution of American Radicalism (Right and Left Wings) from 1860 to the present.

Organizations/Movements discussed include: the KKK, American Nazi Party, Aryan Nations, White Aryan Resistance, Posse Comitatus, Militias, Christian Right, Socialism, Anarchism, Communism, New Left, Women's Movement, American Indian Movement and The Black Panther Party.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

AMST 1100: Contemporary American Culture: Survival in a Changing World

3.00 credits (3.00 lec)

This course focuses on the study of social, cultural, economic, ecological, technological, institutional, and psychological needs, demands and issues as American society hurries toward the future. Accelerated change and the overstimulation of high-speed life in America are examined. The "limits to growth" debate on projections of the interrelationship of population, food, industrialization, pollution and the consumption of nonrenewable resources is analyzed.

Fulfills MnTC Goal Area 5.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

AMST 1132: Ethnic America

3.00 credits (3.00 lec)

Ethnic America celebrates the diversity of American culture through the contributions that various groups (including Native Americans, Hispanics, Africans, Asians, and Europeans) have made to this country, especially in literature and the arts. You will examine the histories of the peoples who make up this country and the myths and realities of the American "melting pot."

Fulfills MnTC Goal Areas 6 and 7.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

AMST 1155: Culture vs. Counterculture: America in the 1960s

3.00 credits (3.00 lec)

This course is a study of American art, literature, politics, music and social values in the 1960s. You will closely examine the impact of African American, Native American, and other minorities-including gay and lesbian communities-in building a viable counterculture that shaped American cultural values to the present time.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

AMST 2998: Directed Study

Prerequisites: One course in AMST.

Anthropology

ANTH 1104: Human Origins

3.00 credits (3.00 lec)

This course is an introduction to the archaeological evidence and theories developed by physical anthropologists to explain the origin and evolution of the human species. The course examines theories related to evolution, adaptation and variation. Primates, as human predecessors, are examined in order to understand the first step in human evolution. Each stage of human development is then examined. Prehistoric evidence uncovered by archaeologists, the foundation of the course, is studied.

Fulfills MnTC Goal Area 5

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ANTH 1105: Introduction to Cultural Anthropology

3.00 credits (3.00 lec)

Cultural anthropology is the study of contemporary and historically recent human societies and cultures. The main focus of this field is culture—the customs and beliefs of human groups. Anthropologists are especially fascinated by the great variety of the world's people and cultures; therefore, describing and attempting to understand and explain this cultural diversity is one of the discipline's major objectives. During the semester, you will examine the concept of culture, the diversity in adaptive strategies; diversity in kinship, marriage and family; economic systems; ideas about gender; political life; relationships with the supernatural; and social inequalities cross-culturally.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ANTH 1110: Introduction to Archaeology

3.00 credits (3.00 lec)

This course is an introduction to the archaeological field and profession. Archaeology is the study of human material culture, the things we create, carry around and leave behind. Through artifact and site study, lectures and videos, you will examine archaeology's history, theory, and methods including possible careers. You will gain a solid understanding of how archaeology is used on a daily basis, highlighting questions of ethics, economy, subsistence, status, race, consumption, inequality and gender.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ANTH 1150: Women in Cross-Cultural Perspective

3.00 credits (3.00 lec)

This course examines the theories, concepts and methods that anthropology brings to the study of women. Sex and gender are central features shaping our lives, and you will explore the biological constructions of the female sex and cultural constructions of the feminine gender. You will also analyze the ways in which women's lives differ and are comparable cross-culturally and how you can understand these differences and similarities.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ANTH 1200–1220: Current Issues in Anthropology

1.00–3.00 credits

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ANTH 2998: Directed Study

Prerequisite: One course in ANTH.

Apparel Technologies

APRL 1000: Industrial Sewing Methods

4.00 credits (3.00 lec/1.00 lab)

This hands-on course provides technical, detail-oriented sewing instruction through lecture, demonstration, practice and application in an industrially equipped laboratory. Upon completion of this course, you will have knowledge of industrial sewing techniques, basic garment construction order, industrial equipment operation and basic maintenance. In this course, use of standard techniques and terminology prepares you for further coursework in the Apparel Technologies program. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

APRL 1050: Open Lab

1.00 credit (1.00 lab)

This is an elective course that permits you to spend an additional 100 minutes per week of faculty-supervised time working in program laboratories on projects required by coursework being taken concurrent with the open lab. Must be taken A–F.

Corequisite: Concurrent registration in another APRL course.

APRL 1100: Textiles

3.00 credits (2.00 lec/1.00 lab)

Because fabric is the primary ingredient in apparel, characteristics of both natural and manufactured fibers are studied in this course. An in-depth study of cloth fabrication will be covered, including burn-test identification and federal textile labeling necessary for garment production. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

APRL 1200: Pattern Grading and Size Analysis

2.00 credits (2.00 lec)

This course will explain and demonstrate the skill of developing multiple-sized patterns by simple and reliable methods. You will learn fundamental methods that are useful guides to grading patterns for all styles of ready-to-wear clothing. You will have a better understanding of the mechanics of grading and realize the importance of knowing how to grade properly. Must be taken A–F.

Prerequisite: APRL 1360.

APRL 1360: Pattern Development 1

3.00 credits (1.00 lec/2.00 lab)

This course covers the development of basic bodice and sleeve slopers, using body measurements. You will learn to take accurate measurements, analyze fit, and make pattern adjustments. You will create style variations by learning to manipulate basic slopers. You will learn appropriate terminology and use drafting tools to make working and final patterns. Must be taken A–F.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisites/Corequisites: APRL 1000, APRL 1100.

APRL 1400: Garment Construction

3.00 credits (2.00 lec/1.00 lab)

This course provides the basic techniques of garment construction. You will apply these techniques by constructing a lined vest and pant. You will also explore other garment construction techniques, such as zipper applications, interfacing, pocket construction, closures and hemming. Must be taken A–F.

Prerequisites: APRL 1000 and APRL 1360.

Corequisites: APRL 2150, APRL 2300 and APRL 2750.

APRL 1660: Fitting Analysis and Application

3.00 credits (1.00 lec/2.00 lab)

This course provides techniques for solving fitting problems with a variety of garments. You will analyze and devise solutions to fitting problems with pants, skirts, blouses, shirts, jackets, and dresses. You will then practice sizing, fitting and sewing alterations. Must be taken A–F.

Prerequisites: APRL 1000, APRL 1400 or instructor approval.

APRL 1800: Draping and Pattern Workroom

4.00 credits (2.00 lec/2.00 lab)

Draping is the art of creating patterns by draping fabric on a dress form; it is the three-dimensional method that allows for visual analysis. You will start with basic bodices and advance through bias draping. You will also learn the industrial pattern workroom process from design through production patterns. Must be taken A–F.

Prerequisite: APRL 1360.

APRL 2150: Computer-Aided Design

4.00 credits (2.00 lec/2.00 lab)

This course provides training using standard industry software. You will learn digitizing, grade-rule application, and marker making, as well as plotting patterns and markers. You will apply flat pattern design skills to the computer and develop pattern pieces and models. Computer-aided design software will allow you to create and alter pattern using imperial and metric measurements. Must be taken A–F.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; APRL 1360 or instructor approval.

APRL 2350: Pattern Development 2

3.00 credits (1.00 lec/2.00 lab)

This course will provide you with the technical skills essential for developing industry standard patterns for complex designs. You will analyze, develop and construct patterns for notched collars, kimono sleeves, and torso and sheath style garments. You will identify and apply dart manipulation methods and construct original patterns. Must be taken A–F.

Prerequisites: APRL 1360 or instructor approval.

Corequisites: APRL 1400, APRL 2150, APRL 2750.

APRL 2420: Advanced Garment Construction

3.00 credits (1.00 lec/2.00 lab)

This course presents advanced levels of garment construction. You will explore pattern adjustment, fitting techniques, and specialized construction applications. You will learn and use specialized techniques for a variety of ready-to-wear and couture garments. You will analyze fit, perform pattern adjustments, and construct a jacket and shirt. Must be taken A–F.

Prerequisites: APRL 1400, APRL 2350, or instructor approval.

Prerequisite/Corequisites: APRL 1800.

APRL 2550: Clothing Line Design

4.00 credits (2.00 lec/2.00 lab)

This course is a capstone to the Apparel Technologies program. You will have the opportunity to demonstrate concepts and skills by developing a line of clothing. You will explore fashion history, color theory, concept and theme development, and the creative process. Also, you will examine market categories, fabrication and sourcing. Must be taken A–F.

Prerequisites: APRL 2350 or instructor approval.

Prerequisites/Corequisites: APRL 1800 and APRL 2420 or instructor approval.

APRL 2650: Internship

2.00 credits (2.00 lab)

This course provides experiences in an industrial setting with an apparel manufacturer. You will have the opportunity to review portfolios, develop interview skills, practice time management, and apply apparel technology skills at an actual worksite. Internships are only available to advanced certificate-seeking students. Must be taken A–F.

Prerequisites: APRL 1360, APRL 1400, APRL 2350 or instructor approval.

APRL 2750: Product Development and Manufacturing

3.00 credits (1.00 lec/2.00 lab)

This course provides techniques in the product development and manufacturing process of garments. You will design, spec and manufacture an apparel or soft goods product. You will learn about trends, line development, prototypes, fabric sourcing, costing, and operations. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; APRL 1000, APRL 1360.

APRL 2900: Bridal and Special Occasion

2.00 credits (1.00 lec/2.00 lab)

This course will cover fitting and construction skills specific to the Bridal and Special Occasion markets, with an emphasis on couture techniques. You will construct samples and, as a capstone project, a bridal or evening wear test garment. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060, APRL 1000, APRL 1360 or instructor approval.

Corequisite: APRL 1400.

APRL 2940: Leather and Fur Construction

3.00 credits (2.00 lec/1.00 lab)

This course provides insight into the origin of leather and into its manufacturing process. You will gain practical experience in making a leather garment and finishing techniques in fur. Must be taken A–F.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; APRL 1000, APRL 1360 or instructor approval.

APRL 2998: Directed Study

Must be taken A–F.

Prerequisites: One course in APRL; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Arabic

ARAB 1000: Beginning Arabic 1

5.00 credits (5.00 lec)

Beginning Arabic introduces you to the classic, contemporary Arabic language, including the written alphabet and sound system. You will develop basic listening, speaking, reading and writing skills necessary to communicate about self, family and daily life, as well as basic survival needs. You will also explore cultural aspects of the Arabic-speaking world, as well as various dialectical variations in the Arabic-speaking world.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ARAB 1100: Beginning Arabic 2

5.00 credits (5.00 lec)

This course builds upon the skills developed in ARAB 1000. You will be able to initiate conversation and ask questions related to their needs, family, education and other basic communication idioms. You will demonstrate these skills in speaking, writing, listening and reading. You will learn vital sociocultural aspects of oral communication and compose simple narratives in classic, contemporary Arabic. You will also learn regional dialectical variations of the language.

Fulfills MnTC Goal Area 8.

Prerequisites: ARAB 1000; Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Architectural Technology

ARCH 1000: Architectural Technology Lab 1

6.00 credits (6.00 lab)

This course introduces you to the production of residential construction drawings. Principles of hand-drafting techniques will be used to assemble plan, elevation and section views for several houses. You will construct models, sketch and hand-draw sets of house plans for a variety of wood construction types.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 1020 and ARCH 1030.

ARCH 1010: Architectural Orientation

2.00 credits (2.00 lec)

This course is an introduction to the architectural profession. Topics cover office practice, construction analysis, current architects' and students' work, as well as a review of architectural plans. The course focuses on what to expect from a job with an architectural firm.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1020: Building Technology 1

2.00 credits (2.00 lec)

This course will introduce you to the technology needed to assemble a residential construction document package. Construction materials such as windows, wood, concrete, roofing and steel will be analyzed. Emphasis will be given to incorporating construction products into buildings that you are preparing in lab assignments (ARCH 1000).

Corequisites: ARCH 1000; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1030: Introduction to CAD

2.00 credits (2.00 lec)

This course introduces you to the Microsoft Windows environment and the computer application of two-dimensional AutoCAD as applied to architectural drafting. Classes address basic drawing and editing commands used to produce and manipulate technical drawings within the AutoCAD environment.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 1000 or instructor approval.

ARCH 1200: Architectural Technology Lab 2

6.00 credits (6.00 lec)

This course involves you in the assembly of complete sets of construction drawings for wood frame and light commercial institutional projects. Exploration of the theory and application of various building materials, systems and drawing conventions is emphasized.

Prerequisites: ARCH 1000; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 1220 and ARCH 1230.

ARCH 1220: Building Technology 2

2.00 credits (2.00 lec)

The course focuses on the technology needed to assemble institutional projects. A variety of light-frame commercial systems will be examined, including wood framing, exterior finishing systems, interior walls and ceilings, and details.

The course will analyze the assembly of projects assigned in ARCH 1200.

Prerequisites: ARCH 1020; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 1200 and ARCH 1230.

ARCH 1230: Intermediate CAD

2.00 credits (2.00 lec)

This course introduces you to the computer application of AutoCAD as applied to two-dimensional architectural drafting. Advanced drawing and editing commands will be used to produce and manipulate technical drawings. Emphasis will be placed on application of CAD to the production of lab projects assigned in ARCH 1200.

Prerequisites: ARCH 1030; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 1200 or instructor approval.

ARCH 1500: Building Structures

3.00 credits (3.00 lec)

This course provides a basic understanding of the structural design for beams, columns, and joists in wood, steel, and concrete. It emphasizes the nature of frame structures and is intended to provide an architectural technician with the knowledge necessary to work with a structural engineer.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1510: Mechanical and Electrical Systems

3.00 credits (3.00 lec)

This course provides an overview of the selection criteria and the design process for heating, ventilating and air conditioning, electrical systems, water supply and sanitation, lighting, acoustics and transportation systems. The interrelationship of architecture and the engineering functions is explored.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1520: Building Codes/Zoning/Specifications

2.00 credits (2.00 lec)

This course includes a study of the requirements and restrictions which, in the interest of public safety and welfare, have been established by law to govern the materials and construction of building design. Specifications that describe building materials and their installation are discussed.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1530: Architects' Professional Practice

2.00 credits (2.00 lec)

The course presents the contracts and documents that are used in the architectural profession. You will examine American Institute of Architects (AIA) documents ranging from change orders to the AIA general conditions. The course will review the importance of conducting an architectural practice in a business-like way.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 1540: Architectural History

3.00 credits (3.00 lec)

You will review the history of architecture through the evolution of styles from ancient Egyptian through postmodern. The class will analyze the architectural styles of civilizations from 2300 BC to the 20th century and study major buildings from the Parthenon to the Pantheon.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 2000: Architectural Technology Lab 3

6.00 credits (6.00 lab)

This course covers the assembly of a commercial construction drawing package for a building that is approximately 25,000 square feet. You will develop a CAD working drawing set (from a design development package) that will include structural framing, plans, elevations and detailed section drawings.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2020 and ARCH 2030.

ARCH 2020: Building Technology 3

2.00 credits (2.00 lec)

This course is an advanced exploration into the technology required to assemble a two-story commercial building. The course will study detailed assembly of conditions ranging from hydraulic elevators to building flashing. The lab project assembly of a commercial building (ARCH 2000) will be used as a model to research construction conditions.

Prerequisites: ARCH 1200; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2000 and ARCH 2030.

ARCH 2030: Applied CAD

2.00 credits (2.00 lec)

This course covers the application of computer drafting (using AutoCAD) with standards used in architects' offices. You will learn a CAD "vocabulary" in the production of contract documents (taken concurrently in ARCH 2000) with an emphasis on what can be anticipated in office practice. Advanced drawing and editing commands will be used to produce and manipulate architectural drawings.

Prerequisites: ARCH 1230; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2000 or instructor approval.

ARCH 2200: Architectural Technology Lab 4

6.00 credits (6.00 lab)

This course provides information necessary for the design and assembly of a light commercial building. You will use the architectural program and building design developed in ARCH 2000 to assemble a complete set of CAD-generated construction drawings.

Prerequisites: ARCH 2000; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2220 and ARCH 2230.

ARCH 2220: Building Technology 4

2.00 credits (2.00 lec)

This course analyzes the construction technology necessary to assemble commercial buildings that you program and design (in ARCH 2000). The course will address the materials, research and detail analysis that are necessary to assemble CAD-generated construction drawings for ARCH 2200.

Prerequisites: ARCH 2000; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2220 and ARCH 2230.

ARCH 2230: Advanced CAD

2.00 credits (2.00 lec)

This course provides the basic principles of creating AutoCAD three-dimensional architectural drawings. The application of advanced drawing, editing, manipulation and rendering capabilities will be introduced to produce three-dimensional architectural drawings.

Prerequisites: ARCH 2030; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: ARCH 2200 or instructor approval.

ARCH 2500: Office Internship

7.00 credits (7.00 int)

The course will provide on-the-job experience in an architect's office. The course will provide hands-on experiences ranging from using CAD to working with an architectural team to produce construction drawings.

Prerequisites: ARCH 1200; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 2550: Independent Study

3.00 credits (3.00 lec)

This course will allow you to develop a research model on topics ranging from construction products to computer-aided drafting. The independent study involves developing questions in a specific field, conducting research and proving the results.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

ARCH 2998: Directed Study

Prerequisites: One course in ARCH; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Area, Cultural and Ethnic Studies

ACES 1000: The Human Experience

3.00 credits (3.00 lec)

The Human Experience explores what it means to be human by introducing you to the wide world of ideas. The course will look at human beings from a social and biological perspective, as well as see how people express themselves in the humanities, including literature, art, music, philosophy, architecture, and so forth. The course will expand your knowledge of ideas and give you ways to explore and understand the humanities.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ACES 1100: Service in Spanish-Speaking Communities

3.00 credits (3.00 lec)

This course focuses on learning about the Spanish-speaking communities in the United States in the areas of culture, socio-economic demographics, business, and education. You will study the community, culture, and education of Spanish-speakers in the United States, and primarily in Minnesota and the Minneapolis/St. Paul Metropolitan area through the integration of literature and arts, other academic materials, discussions, guest speakers, and visits to the community while doing community service in three areas: community/cultural centers, the business sector, and educational settings.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ACES 1120: Community Development and Indigenous Cultures

3.00 credits (3.00 lec)

In this course, you will be introduced to the concept of community from indigenous perspectives through non-profit organizations, private consulting firms, advocacy groups, and government. You will examine the interconnected political, economic, and physical environments of social and cultural groups that maintain an identity, with a focus on Native American reservation and off-reservation communities. This course will include a service learning component with a community different from your own.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070 or instructor approval.

ACES 1121: World Cultures 1

3.00 credits (3.00 lec)

This course is an active, interdisciplinary examination of European, Asian, African, and New World cultures in art, literature, architecture, and music from prehistory to approximately 1500. Creations of these various cultures are examined in light of aesthetic, philosophical, ethical and political issues relevant to each continent. You will learn to respond critically to relevant literature and other art forms through the use of readings, lectures and discussions, and visual aids.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 1122: World Cultures 2

3.00 credits (3.00 lec)

This course is an active, interdisciplinary examination of European, Asian, African, and New World cultures in art, literature, architecture, and music from approximately 1500 to the present day. Creations of these various cultures are examined in light of aesthetic, philosophical, ethical and political issues relevant to each continent. You will learn to respond critically to relevant literature and other art forms through the use of readings, lectures and discussions, and visual aids.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 1135: 20th Century: 1930–Present

3.00 credits (3.00 lec)

This course examines the Great Depression and the rise of the nationalist fervor in Germany, which led the world into its second great international war and the production of nuclear weapons. You will examine the accelerating changes in society mirrored in the arts as postindustrial and postmodern civilization radically redefined the role of the humanities in our lives today. You will learn to respond critically to relevant literature and other art forms through the use of readings, lectures and discussions, visual aids, and perhaps a field trip to the Minneapolis Institute of Arts.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisites: One course from the MnTC Goal Area 1.

ACES 1140: Introduction to Chicana/o Studies

3.00 credits (3.00 lec)

This interdisciplinary course explores the experiences, both past and present, which have impacted Mexican Americans (Chicanas/os) living in the United States. You will gain an elementary understanding of the history, heritage, culture and socio-political issues affecting Chicanas/os and learn about Chicana/o cultural expression through an examination of literature, music, film and art. You will also learn to respond critically to relevant course materials and will explore in depth one topic of your choice.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: one course from MnTC goal area 1.

ACES 1152: Popular Culture in 20th Century America

3.00 credits (3.00 lec)

This class begins by attempting to define the term “popular culture.” You then will explore music, film, literature, media, advertising and various cultural icons in American history. From this exploration, you will gain an understanding of the influence of popular culture in the 20th century. You will also explore the various forms of popular culture that have emerged in diverse ethnic, racial and sexual groups.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 1190: World Religions

3.00 credits (3.00 lec)

This course surveys major religious traditions of the East and West, including Hinduism, Buddhism, Daoism, Confucianism, Islam, Judaism, and Christianity. You may study other religions depending on the special interests of the instructor and students. You will use various approaches, including historical, comparative as well as experiential. Upon completion, you will know of the origins, history, beliefs, and practices of the religions studied. You will be able to apply your knowledge of the religions covered to current critical world issues such as peace and violence, gender relations, environment and globalization.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: One course from the MnTC Goal Area 1.

ACES 1200: Chinese Arts and Culture

3.00 credits (3.00 lec)

This course introduces you to Chinese culture through the study of its various forms of art. You will learn about calligraphy, poetry and painting—often called “Three Perfections”; architectural arts, such as the garden, pagoda and temple; and performing arts—drama, music and film. You will also learn about the two most well-recognized Chinese products—silk and porcelain, as they have long been important media for Chinese art. Through a careful examination of different contexts (social, historical, philosophical and religious) in which various art works are produced, you will learn the fundamental values and beliefs of the Chinese people, their understanding of nature and humanity, as well as their interactions with the outside world.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite/Corequisite: ENGL 1110.

ACES 1210: Art and Cultural Studies in China

3.00 credits (3.00 lab)

The purpose of this course is to further your education in Chinese arts and culture by traveling to China for three weeks of intensive study. You will learn firsthand how calligraphy, poetry and painting are incorporated into daily living; hear lectures on various topics, from history and culture to family and education; visit art museums to see both traditional and modern art; and tour some of the most well-known architectural masterpieces: the Forbidden City, the Temple of Heaven, the Great Wall, the Summer Palace, as well as famous gardens, pagodas and Buddhist/Taoist temples, to reinforce previous learnings about Chinese architectural arts in ACES 1200. A tour to silk-worm farms and a silk factory will introduce you to the silk production process and the aesthetic and economic values of silk. You will also see traditional Chinese operas and hear Chinese musicians play traditional Chinese musical instruments. During the trip, you will keep a travel journal, interact with local people, and develop a fine sensitivity and understanding of the Chinese culture and people.

Fulfills MnTC Goal Area 6.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 1500: Introduction to Global Studies

3.00 credits (3.00 lec)

This is an interdisciplinary course designed to introduce you to the basic concepts of global studies. The course will examine the dynamics of changes in global systems, both in the past and at present, from natural and social perspectives—what causes global changes, what are the real and possible effects of these changes, and how do we deal with changes in both local and global settings. The main objective of the course is to provide you with a foundation from which to pursue further studies of related topics. You will also develop communication, critical thinking and problem-solving skills particular to the subject of global studies.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 1510: Global Studies: Themes and Trends

3.00 credits (3.00 lec)

This course provides the opportunity to study specific issues that transcend national borders and national identities. You will build on the foundation acquired in the Introduction to Global Studies course to address specific global issues and develop potential resolutions through a multidisciplinary perspective including political, social, economic, cultural and environmental aspects; multiple perspectives from more than one nation or culture; local and global connections and interdependencies; ethical considerations; and activism.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

ACES 2998: Directed Study

Prerequisite: One course from the MnTC Goal Area 1.

Art

ARTS 1110: Introduction to Art

3.00 credits (3.00 lec)

This course is an introduction to basic concepts of the visual arts in various media. Topics include the significance and language of art. Activities include text reading, slide lectures and gallery tours. You will learn to evaluate artists' work, understand various interpretations of works, and recognize the assumptions underlying these interpretations.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

ARTS 1111: Art History: Ancient to Medieval

3.00 credits (3.00 lec)

This course is a worldwide survey of art from the prehistoric through the Medieval period. Through slide lectures, discussions, videotapes, and museum visits, you will learn to understand art within its historical and social context and to interpret the meaning of art in an informed manner.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ARTS 1112: Art History: Renaissance to 18th Century

3.00 credits (3.00 lec)

This course is a worldwide survey of art from the Renaissance through the 18th century. Through slide lectures, discussions, videotapes, and museum visits, you will learn to understand art within its historical and social context and to interpret the meaning of art in an informed manner.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ARTS 1113: Art History: Modern to Contemporary

3.00 credits (3.00 lec)

This course is a survey of modern and contemporary art from the 19th century to the present. Through slide lectures, discussions, videotapes, and museum visits, you will learn to understand art within its historical and social context, and to interpret the meaning of art in an informed manner.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ARTS 1121: Drawing 1

3.00 credits (1.00 lec/2.00 lab)

This course is an introduction to the basic drawing principles of line, perspective, composition and shading. Demonstrations, slides and studio sessions teach you to respond critically to art, as well as to apply aesthetic principles to your own and others' work.

Fulfills MnTC Goal Area 6.

ARTS 1125: Ceramics 1

3.00 credits (1.00 lec/2.00 lab)

This course introduces you to primary methods of forming clay. It focuses on hand-building methods; however, you are also introduced to wheel-throwing techniques. While the primary focus is on making ceramics, critiques and lectures will introduce the class to a general historical background and to fundamental design issues.

Fulfills MnTC Goal Area 6.

ARTS 1132: Printmaking

3.00 credits (1.00 lec/2.00 lab)

This course will focus on three primary ways of making prints: monoprinting, relief printing and intaglio. While making prints with these methods in both traditional and experimental ways, you will arrive at a style that is uniquely your own. You will also learn about the history of printmaking to understand the uniqueness of prints in the context of other media.

Fulfills MnTC Goal Area 6.

ARTS 1133: Sculpture

3.00 credits (1.00 lec/2.00 lab)

This course introduces you to artwork done in three dimensions. You will use a variety of materials and will work with both traditional and contemporary methods of forming. Primary forming methods include casting, modeling, carving, assembling and fabricating; primary materials include clay, plaster, wire, paper and foam. Lectures and critiques include some historical emphasis and some emphasis on design issues as they relate to form, volume, planes and space.

Fulfills MnTC Goal Area 6.

ARTS 1141: Design: Foundations of Studio Art

3.00 credits (3.00 lec)

This course helps you understand the way art is put together. The class will practice design elements and principles (i.e. color, space, composition, contrast) by making designs (art) in various media. Both two-dimensional and three-dimensional design concepts are studied.

Fulfills MnTC Goal Area 6.

ARTS 1142: Painting 1

3.00 credits (1.00 lec/2.00 lab)

This course explores important concepts in painting. While most of the emphasis is on painting, lectures and critiques allow for some investigation of painting in an historical context. This course defines painting in a broad sense and allows for an exploration of both traditional and nontraditional methods. Acrylic paint is the medium used. The course is designed to help you with all levels of experience.

Fulfills MnTC Goal Area 6.

ARTS 2211: Women in Art

3.00 credits (3.00 lec)

This course examines women's contributions to the visual arts, primarily as creators of art, but also as viewers and patrons. You will consider the ways in which women throughout history have been represented as the subject of visual images, as well as the social and cultural attitudes reflected in those presentations. A portion of the semester is devoted to a survey of women artists of diverse cultures, from the Renaissance to the present, focusing on art in a variety of media, including painting, sculpture, photography, the graphic arts, textiles and more.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ARTS 2212: Painting 2

3.00 credits (1.00 lec/2.00 lab)

This course refines and expands on concepts learned in Painting 1. It also guides you to develop a personal style so that you may interpret your world in an individual way. Important to the class is the discussion of paintings—your own and the paintings of others. You will learn about well-known painters and paintings and use community galleries and museums as a source for study.

Fulfills MnTC Goal Area 6.

Prerequisite: ARTS 1142.

ARTS 2213: Watercolor

3.00 credits (1.00 lec/2.00 lab)

This course provides an introduction to the basic principles of watercolor, including technique, color usage and composition. There are demonstrations, slide lectures and studio sessions. You will learn to respond critically to watercolors and to apply aesthetic principles to your own and others' work.

Fulfills MnTC Goal Area 6.

ARTS 2214: AFA Portfolio

2.00 credits (1.00 lec/1.00 lab)

This course provides the fundamental skills needed to present your own art. You will select a body of work that has visual or thematic continuity and represents the culmination of your AFA studies. You will install an exhibition of the results of that study. The exhibition will be accompanied by your written artist's statement. You will develop a portfolio in preparation for an advanced degree.

Fulfills MnTC Goal Area 6.

Prerequisites: ARTS 1121, ARTS 1125, ARTS 1133, ARTS 1141, ARTS 1142 and PHOT 1100.

ARTS 2221: Life Drawing

3.00 credits (1.00 lec/2.00 lab)

This course is devoted to understanding and using life forms (primarily human) as a subject in fine art. Lessons will incorporate a variety of art media and styles to render and interpret subjects. Many sessions of this course will use the human figure, both clothed and nude, as a subject.

Fulfills MnTC Goal Area 6.

Prerequisite: ARTS 1121.

ARTS 2222: Drawing 2

3.00 credits (1.00 lec/2.00 lab)

This course is a continuation of the principles dealt with in Drawing 1. Such subjects as portraiture, the human figure, landscape and still-life are explored. There will be demonstrations, slide lectures and studio sessions. You will learn to respond critically to drawings and to apply aesthetic principles to your own and others' work.

Fulfills MnTC Goal Area 6.

Prerequisite: ARTS 1121.

ARTS 2225: Ceramics 2

3.00 credits (1.00 lec/2.00 lab)

This course refines and expands on concepts learned in Ceramics 1. It guides you to develop a personal style in clay so that you may interpret your world in an individual way. Wheel-throwing techniques are concentrated in design and function of ceramic vessels, while hand-building methods focus on narrative sculpture. Firing and glazing techniques will be discussed in detail. You will learn about well-known historic and contemporary ceramic artists and use community galleries and museums as a source for your studies.

Fulfills MnTC Goal Area 6.

Prerequisite: ARTS 1125.

ARTS 2233: Sculpture: Direct Metals

3.00 credits (1.00 lec/2.00 lab)

This course investigates figurative, nonfigurative, environmental and spatial problems through the use of basic oxygen-acetylene and electric arc welding. You will have ample opportunity to practice techniques needed to make original sculptures. This course will discuss and present major periods and styles of metal art from 3500 BC to postmodern times with emphasis on developing your visual concepts through technical application and experimentation. You will also discuss how to set up an economical studio, purchase stock and maintain equipment. *Fulfills MnTC Goal Area 6.*

ARTS 2998: Directed Study*Prerequisite: One course in ARTS.*

Astronomy

ASTR 1110: Astronomy

3.00 credits (3.00 lec)

This survey course introduces you to the objects and processes in the universe with particular emphasis on collections of ordinary matter like planets, stars and galaxies; more exotic matter like pulsars, black holes and dark matter; their interactions; and the human place in and responsibility to the environment. Topics include: stargazing; the scale of our universe; some history of astronomy; how we get information from the universe; our solar system; comparative environments; threats to our environment; the Greenhouse Effect; other solar systems; the birth, life and death of stars; dark matter and dark energy; and the origin and fate of our universe. The optional lab is necessary for transfer as a lab science and to satisfy some Natural Science competencies.

*Fulfills MnTC Goal Area 3.**Prerequisite: High School algebra or equivalent.***ASTR 1115: Astronomy Lab**

1.00 credit (1.00 lab)

This laboratory enhancement to the concepts presented in ASTR 1110 is optional but highly recommended. It enables ASTR 1110 to transfer as a lab science and to satisfy Natural Science competencies.

*Fulfills MnTC Goal Area 3.**Prerequisite/Corequisite: ASTR 1110.***ASTR 2998: Directed Study***Prerequisite: One course in ASTR.*

Barbering

BARB 1000: Introduction to Barbering and Histology

4.00 credits (4.00 lec)

This course covers ethics, the history of barbering, fundamentals of haircutting on mannequins, current trends, tools, bacteriology and sanitation, as well as the structure of hair, skin and its appendages, and scalp and skin ailments. This course is intended for students who are admitted to the Barbering program at the beginning of a semester.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1010: Introduction to Barbering

2.00 credits (2.00 lec)

This course covers ethics, the history of barbering, fundamentals of haircutting on mannequins, current trends, tools, bacteriology and sanitation. This course is intended for students who are admitted to the Barbering program mid-semester.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1020: Histology

2.00 credits (2.00 lec)

This course covers the structure of hair, skin and its appendages, and scalp and skin ailments. This course is intended for students who are admitted to the Barbering program mid-semester.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1050: Basic Lab 1

3.00 credits (3.00 lab)

This lab provides you with the practice of basic barbering on clientele.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1100: Basic Lab 2

3.00 credits (3.00 lab)

This lab provides you with continuing practice of basic barbering on clientele.

Prerequisites: BARB 1050; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1150: Basic Fundamentals of Barbering Services

4.00 credits (4.00 lec)

This course covers shaving, shampooing and facial procedures.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1200: Survey Lab 1

3.00 credits (3.00 lab)

This lab provides you with an opportunity to develop the practical skills of contemporary men's haircutting necessary to work in a barber shop.

Prerequisites: BARB 1000 and BARB 1100; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1250: Survey Lab 2

3.00 credits (3.00 lab)

This lab provides you with continuing opportunity to develop the practical skills of contemporary men's haircutting necessary to work in a barber shop.

Prerequisites: BARB 1050, BARB 1100, BARB 1200; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1300: Anatomy and Physiology in Barbering

2.00 credits (2.00 lec)

This course covers human anatomy and physiology in relation to barbering.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1350: Chemical Services

2.00 credits (2.00 lec)

This course covers cosmetic chemistry, wrapping perms, and safely applying hair color and chemicals when working with clientele.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1360: Intermediate Lab 1

3.00 credits (3.00 lab)

This lab provides you with an opportunity to develop skills specific to women's and children's haircutting necessary to work in a barber shop and/or salon.

Prerequisites: BARB 1050, BARB 1100, BARB 1200; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1370: Intermediate Lab 2

3.00 credits (3.00 lab)

This lab provides you with continuing opportunity to develop skills specific to women's and children's haircutting necessary to work in a barber shop and/or salon.

Prerequisites: BARB 1050, BARB 1100, BARB 1200, BARB 1250, BARB 1360; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1400: Business Management in Barbering

2.00 credits (2.00 lec)

This course introduces you to management and sales fundamentals with an emphasis on Minnesota laws and reciprocity. It provides you with experience in customer relations, business and professional ethics, and shop management.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1450: Advanced Technology

2.00 credits (2.00 lec)

This course covers theory behind the identification, creation, application, cutting and care of hairpieces.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1460: Advanced Lab 1

4.00 credits (4.00 lab)

This lab provides you with expanded practice in men's, women's and children's hairstyling.

Prerequisites: BARB 1050, BARB 1100, BARB 1200, BARB 1250, BARB 1360, BARB 1370; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1470: Advanced Lab 2

4.00 credits (4.00 lab)

This lab provides you with continuing expanded practice in men's, women's and children's hairstyling.

Prerequisites: BARB 1050, BARB 1100, BARB 1200, BARB 1250, BARB 1360, BARB 1370, BARB 1460; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1500: Open Lab 1

4.00 credits (4.00 lab)

This lab provides you with in-depth preparation for the Minnesota State Board of Barbering examination.

Prerequisites: BARB 1050, BARB 1100, BARB 1200, BARB 1250, BARB 1360, BARB 1370, BARB 1460, BARB 1470; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1510: Open Lab 2

4.00 credits (4.00 lab)

This lab provides you with continuing in-depth preparation for the Minnesota State Board of Barbering examination.

Prerequisites: BARB 1050, BARB 1100, BARB 1200, BARB 1250, BARB 1360, BARB 1370, BARB 1460, BARB 1470, BARB 1500; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 1520: Job Seeking

1.00 credit (1.00 lec)

In this course, you will create a résumé, write job application letters, complete a job application form and prepare for an employment interview.

Prerequisites: placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BARB 2998: Directed Study

Prerequisites: One course in BARB; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Biology

BIOL 1100: Introduction to Biology

4.00 credits (3.00 lec/1.00 lab)

This course presents biology as a series of fundamental concepts, all focusing on the theme of the unity and diversity of life. It examines four broad topics: genetics (including Mendelian inheritance, mitosis, meiosis and molecular genetics); evolution (Darwin's theory, evidence of evolution and the history of life including humans); organismal biology (the classification, diversity, and evolutionary history of prokaryotes and eukaryotes); ecology (energy flow, nutrient cycling, ecosystems and biogeography); and conservation biology. The course includes two hours of laboratory instruction per week.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1120: Nutrition

3.00 credits (3.00 lec)

This course considers the nutrients and their functions in the human body, basic nutritional requirements, nutrition tools, and guidelines for making sound food choices and reading food labels. You will learn how to plan a balanced diet and how to evaluate nutrition behaviors using popular nutrition literature. No previous coursework in biology is required. Offered as both an on-campus and Web course.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1127: Human Biology

3.00 credits (3.00 lec)

This one-semester course is designed to introduce concepts needed to study the complexity of humans in a biological world. The body systems are investigated and understood in a pattern of wellness. Ecological and genetic topics are also studied. This course does not satisfy the anatomy and physiology requirement of the Nursing Program or replace BIOL 2200 as a prerequisite to BIOL 2224: Anatomy and BIOL 2225: Physiology. Completion of the optional lab (BIOL 1128) is necessary for transfer as a lab science and to satisfy some Natural Science competencies.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1128: Human Biology Lab

1.00 credit (1.00 lab)

Laboratory examination of topics covered in BIOL 1127.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: BIOL 1127.

BIOL 1136: Environmental Science

3.00 credits (3.00 lec)

This course provides an introduction to the relationships between people and the environment in the past, present, and future. You will explore these relationships from an interdisciplinary perspective, including a solid foundation in the natural sciences, and topics ranging from history, economics, and politics to philosophy. The goal is to help you think critically about the local and global impacts of our increasing demand for natural resources. Pollution, landscape destruction, and loss of species, with their respective effects on environmental and human health, force us to explore alternatives for more sustainable relationships with the Earth. Offered as a both an on-campus and Web course. Completion of the optional on-campus laboratory course (BIOL 1137) is necessary for transfer as a lab science and to satisfy some Natural Science competencies.

Fulfills MnTC Goal Areas 3 and 10.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1137: Environmental Science Lab

1.00 credit (1.00 lab)

This on-campus laboratory course examines topics raised in BIOL 1136 through lab experiments and fieldwork. Examples are assessment of water quality, the use of a GIS, biodiversity and acid rain, among others.

Fulfills MnTC Goal Areas 3 and 10.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: BIOL 1136.

BIOL 1160: Biology of Women

3.00 credits (3.00 lec)

This course is designed to give you an opportunity to explore aspects of biology that apply specifically to women. Within the context of body image, this course examines the biological principles, concepts and vocabulary associated with the following topics: the skin; the female reproductive system; menstruation and menopause; pregnancy and fetal development; infertility; genetics and biological sex differentiation. No previous coursework in biology is required.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1180–1184: Special Topics in Biology

2.00 credits

These courses examine a current issue or problem in biology, or provide a field or lab experience not included in the scope of the traditional biology curriculum.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 1190: Biomedical Terminology

2.00 credits (2.00 lec)

This course develops a standard base of commonly used Greek and Latin stem words, prefixes and suffixes from which a working technical vocabulary can be constructed for those in nursing, natural sciences, preprofessional fields and other allied health fields.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2200: Principles of Biology

4.00 credits (3.00 lec/1.00 lab)

This course examines the major concepts of biology and is designed for students majoring in Biology, Nursing, and other science-related fields. Topics provide you with an understanding of the scientific method, basic biochemistry, cell biology, bioenergetics, reproduction, development, genetics, biotechnology, evolution and ecology. The lecture/theory portion of this course is offered both on campus in the classroom and as a Web course. This course includes two hours of required lab per week, which must be taken on campus.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 3.

Prerequisites: MATH 0070, CHEM 1020 or concurrent registration, or one full year of high school chemistry with grades of straight “C” or above within the last five years; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2205: Genetics

4.00 credits (3.00 lec/1.00 lab)

This course presents the principles of genetics at the molecular, cellular and population levels. Chromosome structure and function, gene mapping, mutation and selection, variation, and regulation of gene expression are covered. This course includes two hours of required lab per week.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2200; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2224: Anatomy

4.00 credits (3.00 lec/1.00 lab)

This course provides an in-depth study of tissues and the anatomy of all human body systems. The course focuses on how the shape and composition of the anatomical structures allows them to perform their functions. Pathology of the anatomy may be included, but normal anatomy will be stressed. The lecture/theory portion of this course is offered BOTH on campus in the classroom and as a Web course. This course includes two hours of required lab per week, which must be taken **on campus**.

Fulfills MnTC Goal Area 3.

Prerequisites: MATH 0070, CHEM 1020 and BIOL 2200 OR MATH 0070, one full year of both high school chemistry and general biology with grades of straight “C” or above within the last five years; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2225: Physiology

4.00 credits (3.00 lec/1.00 lab)

This course provides an in-depth study of the functioning of most body systems including the muscle, nervous, cardiovascular, respiratory, digestive, urinary and endocrine systems. Dysfunctions may be included, but normal physiology will be stressed. The lecture/theory portion of this course is offered both on campus in the classroom and as a Web course. This course includes two hours of required lab per week, which must be taken on campus.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2224; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2226: Pathophysiology

2.00 credits (2.00 lec)

This course provides an in-depth study of the chemical, biological and psychological processes involved with alterations of health, using systemic and nonsystemic approaches. This course is offered both on campus and as a Web course.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2225; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2230: Microbiology

2.00 credits (2.00 lec)

This course examines the structure, function, genetics, and metabolism of prokaryotic and eukaryotic microorganisms, including a unit on virology. Disease mechanisms and body defenses, including immunology, are covered. This course has an optional lab (BIOL 2231).

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2200; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2231: Microbiology Lab

2.00 credits (2.00 lab)

In this course, you will learn culturing, microscopy and clinical microbiology techniques. Virology, microbial genetics and immunology are also included. This course meets on campus twice per week in two-hour sessions.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2200; Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: BIOL 2230.

BIOL 2250: Plant Biology

4.00 credits (3.00 lec/1.00 lab)

This course examines the fundamentals of botany, including structure, function, physiology, and reproductive biology of plants and plant-like organisms. This course also studies the diversity, evolutionary history, and ecology of flowering plants, algae, fungi, bryophytes, lower vascular plants, ferns, and gymnosperms. This course includes two hours of required lab per week.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 1100 or BIOL 2200; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2260: Animal Biology

4.00 credits (3.00 lec/1.00 lab)

This course compares the ways in which different animal phyla have solved problems of existence including, for example, support, nervous coordination, locomotion, excretion, respiration and reproduction. Additionally, the course provides a basic framework for understanding the origins and relationships of the major groups of animals. This course includes two hours of required lab per week. Performing dissections is required.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 1100 or BIOL 2200; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BIOL 2500: Molecular Biology

4.00 credits (2.00 lec/2.00 lab)

This course will use an applications-based approach to molecular and cellular biology. You will explore the theories needed to understand and use techniques of molecular biology and methods used to establish current theories. The laboratory will expose you extensively to techniques widely used in academic and industry laboratories.

Fulfills MnTC Goal Area 3.

Prerequisites: BIOL 2231.

Prerequisites/Corequisites: BIOL 2320 and CHEM 2204; all Pre/Corequisites for these courses apply.

BIOL 2998: Directed Study

Prerequisites: One course in BIOL; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Biotechnology

BIOT 1000: Introduction to Bioscience

1.00 credit (1.00 lec)

This course will provide you with an overview of bioscience. You will explore educational and employment opportunities; job-search skills; basic concepts and techniques for effective work in entry-level positions; the scientific basis of the technologies and their historical development; and current applications in medicine, forensics, biomaterials, agriculture and environment. You will learn about national, state and local bioscience laboratories, including the basics of intellectual property law and regulatory agencies that oversee the industry, as well as explore ethical, legal, ecological, and societal issues related to bioscience.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

BIOT 2320: Regulatory Affairs and Quality Control

4.00 credits (2.5 lec/1.5 lab)

This course will address the federal regulations and global, environmental and ethical considerations of bioscience products. You will learn to participate as a responsible stakeholder by following Food and Drug Administration and Environmental Protection Agency regulations. You will gain an understanding of current Good Manufacturing Practices, Quality Control (QC), Good Laboratory Practices, Good Clinical Practices and current Good Tissue Practices. You will apply notions of civic responsibility through study of international regulations, global perspectives, intellectual property laws, and import/export considerations. Laboratory sessions will provide hands-on experience in QC procedures, scientific measurements and safety regulations. You will learn to prepare reagents and solutions, adopt aseptic techniques, sterilization procedures, clean-room procedures and use of various instruments. You will practice critical documentation aspects and learn about Standard Operating Procedures.

Prerequisite: CHEM 1151.

BIOT 2640: Tissue Culture Techniques Theory

1.00 credit (1.00 lec)

This lecture course will address the principles of tissue culture techniques. You will learn about the importance and applications of primary and immortalized cells and the requirements for cell culture. You will appreciate the differences between mammalian, insect cell and yeast culture processes and applications. You will learn about cell and tissue banks and explore the current Good Tissue Practices (cGTP) regulations of Food and Drug Administration (FDA) and quality control as applied to cGTP. You will learn about biosafety while working with cells and tissue and clean-room processes. You will gain an overview of stem cell culture, requirements and regulations. You will learn the principles of cell culture that will prepare you to do laboratory coursework. *Prerequisites/Corequisites: BIOT 2320 or equivalent industry experience; and BIOL 2500 or CHEM 2610 or equivalent.*

BIOT 2641: Tissue Culture Techniques Lab

2.00 credits (2.00 lab)

This laboratory course will use an applications-based approach to tissue culture techniques. You will gain hands-on experience in aseptic techniques, mammalian and insect cell-culture, tissue culture media requirements and preparation, culturing of cells from frozen master cell bank, growth conditions and monitoring, scale-up procedures and freezing of cultured cells. You will learn to process cultured cells for various downstream applications. You will learn about the regulatory affairs as applied to biologics. *Prerequisite/Corequisite: BIOT 2640.*

BIOT 2701-2706: Biotechnology Internship

1.00-6.00 (1.00-6.00 Int)

This course provides you with an opportunity to be an intern in an industry, government, academic or analytical services laboratory. You will participate in a full-or part-time internship, project or field experience. You will make arrangements with an internship supervisor and obtain instructor approval before registering.

Prerequisites: BIOT 2320; instructor permission required.

Prerequisites/Corequisites: CHEM 2420 or BIOL 2500 or CHEM 2620.

BIOT 2720: Undergraduate Research Methods

1.00 credit (1.00 lec)

This lecture course will provide you with the opportunity to learn research methods and processes. You will find and retrieve primary scientific literature relevant to your interest in chemistry, biochemistry or biotechnology or other related fields. You will learn to use library resources and literature databases. You will write a literature review critically evaluating information and its sources and use the information effectively to write a research proposal on a chosen topic. You will summarize a research seminar you attend in the course and participate in a field-trip to the University of Minnesota libraries. Must be taken A-F.

Prerequisites/Corequisites: CHEM 2410 or CHEM 2610 or BIOL 2500 or instructor permission.

BIOT 2721: Undergraduate Research Lab

2.00 credits (2.00 lab)

This course will provide you with the opportunity to carry out undergraduate research related to chemistry, biochemistry or biotechnology applications. You will learn about research methods and processes. You will write a literature review critically evaluating information and its sources and use the information effectively to write research proposal on a chosen project approved by the instructor. You will carry out the proposed project under the supervision of the instructor in the laboratory. You will learn to do detailed laboratory work accurately and with precision, incorporating good laboratory practices, documentation procedures and regulatory affairs standards. You will develop analytical and data management skills and gain exposure to concepts such as validity, reliability, measurement, and bias. Upon completion of the project, you will write a short thesis and defend your thesis. You will explore the possibilities of publishing the results.

Prerequisites/Corequisites: BIOT 2720 or CHEM 2720; and CHEM 2420 or CHEM 2620 or BIOL 2500 and instructor approval.

Business Management

BUSN 1140: Introduction to Business

3.00 credits (3.00 lec)

This course is designed to give you an understanding of the functional areas of business. Major emphasis is placed on business ownership; business decision-making; management, marketing, finance, budgeting and production; and the relationship among business, government and labor.

BUSN 1142: Principles of Marketing

4.00 credits (4.00 lec)

You will explore each of the elements of the marketing mix, including product development, pricing strategies, channels of distribution, promotion and buyer behavior. Emphasis will be on analyzing the marketing environment and developing a basic marketing strategy. You will demonstrate your understanding of these marketing elements by analyzing and creating a marketing plan throughout the semester.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 1143: Principles of Advertising

3.00 credits (3.00 lec)

In this course, you will take a managerial approach in your evaluation and selection of appropriate promotional elements. Major topics include advertising goals, appeals, media evaluation and the advertising agency, leading to the development of a total advertising campaign. You will examine current award-winning newspaper, television, radio and magazine ads with local representatives from each medium, including visits to their respective workplaces.

BUSN 1145: Small Business Management

3.00 credits (3.00 lec)

This course will provide you with the essential information needed to create and operate a small business. You will examine each of the functional areas of a small business, including marketing, management, accounting and finance.

BUSN 1154: Business Communications

3.00 credits (3.00 lec)

This course emphasizes both written and oral skills used in large and small businesses. You will learn to prepare memos, proposals, customer correspondence and other forms of standard written business communications. In addition, you will learn how to prepare oral reports and lead group discussions.

BUSN 1155: Human Relations and Team Building

3.00 credits (3.00 lec)

This course will provide you with a broad understanding of the human relations skills necessary to succeed in organizations. The course will focus on the development of team building, managing one's self and one's career, organizational relationships, workplace diversity, ethics, and personal responsibility.

BUSN 1166: Women in Leadership and Management

3.00 credits (3.00 lec)

This course is specifically designed to provide women with the unique skills and insights necessary for their leadership success. You will focus on the application of managerial skills and the unique problems that impact women's managerial effectiveness. Topics will include role conflict, dual career, acceptance, stereotyping, mentoring and networking.

BUSN 1180: Principles of Banking and Finance

3.00 credits (3.00 lec)

This course gives you an overview of the financial services industry and its relationship to finance. You will learn basic banking principles, such as evolution of banking, banking legislation, bank compliance issues, monetary policy; deposit operations, lending functions and the electronic financial services. You will also learn the fundamentals of finance as it relates to banking by exploring funds management, bank investments, and calculating and measuring financial performance.

BUSN 1182: Principles of Consumer Lending

3.00 credits (3.00 lec)

This course is an overview of each aspect of the consumer credit market. You will focus upon the characteristics of each consumer credit product; methods and procedures for issuing consumer credit loans; the regulatory requirements in making these loans; and how to determine the profitability of these loans for the lender.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 1183: Principles of Commercial Lending

3.00 credits (3.00 lec)

This course covers the wide range of the commercial credit lending process and focuses specifically on small businesses. You will learn each category of commercial loan and the regulations affecting those loans. You will learn the loan application process; how to conduct personal and financial statement credit investigations; the specific process of loan documentation; loan closings; and cross-selling techniques used in the commercial lending process.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 1190: Selling Financial Institution Products

3.00 credits (3.00 lec)

You will develop the necessary skills required to facilitate successful relationships between sales staff and customers in a financial institution setting. You will explore the techniques of cross-selling and relationship selling within a sales-oriented bank culture. In addition, you will actively engage in the sales process by matching the needs of a customer to a depository solution set; understand customer problems and solution requirements and then apply the proper product set; and rigorously study bank products and the short-term/long-term impact each solution offers to customers. The sales pieces of cross-selling and relationship management will provide you with a well-rounded approach to sales by learning from several viewpoints, including the bank's and the customer's.

Prerequisites: BUSN 1180; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 1200: Computer Applications in Home and Business

3.00 credits (3.00 lec)

This intermediate-level course builds on fundamental computing skills and concepts. You will use the productivity tools and features of MS Office software to solve problems and to create documents, databases, spreadsheets and presentations needed for other college courses or personal and professional use. You should have previous computer experience and keyboarding skills.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; CSCI 1100 or COML 1000 or COML 1100 or ITEC 1100 or BTEC 1010 or satisfactory completion of the College computer literacy "Test out" option; keyboarding skills recommended.

BUSN 2202: Financial Accounting

4.00 credits (4.00 lec)

Accounting as a process of providing useful financial information to investors, creditors, managers and other users is explored in this course. Emphasis is on understanding the accounting process, financial statements, and the use and limitations of accounting information.

Prerequisites: Placement into MATH 0070 or completion of MATH 0060.

BUSN 2224: Managerial Accounting

4.00 credits (4.00 lec)

This course is designed to provide you with an understanding of what kind of information is needed by management; where this information can be obtained; and how this information is used by managers as they carry out their planning, control, and decision-making responsibilities.

Prerequisite: BUSN 2202.

BUSN 2252: Principles of Management

4.00 credits (4.00 lec)

This course provides a theoretical overview of management by examining the managerial functions of planning, leading, organizing and controlling an organization's resources.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 2254: Entrepreneurship

3.00 credits (3.00 lec)

In this course, you will learn the process of launching a new business venture from an original or innovative idea. The focus will be on the stages of development of the new venture including research, planning, feasibility analysis, capitalization and management. It is recommended for students who are in the process of or planning to start their own businesses.

Prerequisite: BUSN 1140.

BUSN 2256: Supervision and Leadership Skills

3.00 credits (3.00 lec)

This course is designed to give you an introduction to management functions and principles as they apply to the supervisory level of management. A major portion of this course will focus on the leadership skills and techniques necessary for successful group leadership.

BUSN 2260: Legal Environment of Business

4.00 credits (4.00 lec)

This course is designed to give you an understanding of the rights and duties you have as citizens, individually and in the business world. It covers such business-oriented subjects as contracts, agencies, bills and notes; the law of negligence; the system of courts; and instruction on criminal law with emphasis on protections afforded businesses.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BUSN 2270: Introduction to International Business

3.00 credits (3.00 lec)

This course presents an overview of international business. You will explore the role of corporations throughout the world. In addition, you will actively assess the role of culture in international business decisions. You will understand the basics of international accounting, marketing, and the legal issues surrounding multinational firms. You will study international agencies and the relationship between foreign and domestic markets. You will study the ways currency and investments affect business decisions. Must be taken A-F.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

BUSN 2301: Community Development Process

3.00 credits (3.00 lec)

This course prepares you for work in careers with not-for-profit organizations, commercial development companies, private consulting firms, advocacy groups, and government agencies. You will explore community development with special attention to indigenous cultures, including a focus on Native American community development. This course will introduce you to the basic concepts, principles, and practices of community development, as well as the role of citizen participation. The course will include a service learning component. Upon completion, you will be able to make informed decisions about career pathways into community development, organizing or planning.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060 or instructor approval.

BUSN 2302: Community Development and Project Management

3.00 credits (3.00 lec)

This course provides an understanding of the best practices of community development project management. You will examine the roles and responsibilities of project development team members and managers. You will become familiar with budgeting, finding funding and financing methods. You will also participate in a service learning component. You will make informed decisions about career pathways into community development, organizing or planning.

Prerequisites: BUSN 2301 or instructor approval.

BUSN 2998: Directed Study

Prerequisites: One course in BUSN.

Business Office Technology

BTEC 1020: Introduction to Computer Applications

3.00 credits (2.00 lec/1.00 lab)

This course teaches basic microcomputer operation as a business productivity tool. Topics will include the current Windows operating system; use of a mouse and keyboard; hardware and software; basic maintenance; data communications; data security; Internet and World Wide Web. You will use Microsoft Access to create databases, Microsoft Excel to create worksheets and charts, and Microsoft PowerPoint to create professional presentations. Must be taken A-F.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

BTEC 1060: Keyboarding

3.00 credits (1.00 lec/2.00 lab)

In this course, you will develop touch-control of the keyboard and proper keyboarding techniques; build speed and accuracy; and practice applying basic skills to the formatting of letters, reports, memos, tables, forms and other kinds of business communication. The keyboarding goal will be to attain a minimum speed of 45 words per minute with five errors or fewer on a five-minute timing.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 1080: Microsoft Word

3.00 credits (2.00 lec/1.00 lab)

In this course, you will learn to use Microsoft Word processing software for both business and personal use. Topics include character formatting; setting margins, tabs and indents; moving/copying and revising text; and printing and formatting pages.

Prerequisites: Keyboarding skills or BTEC 1060; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 1125: Medical Terminology and Disease Condition 1

3.00 credits (3.00 lec)

This course is designed for students wanting an understanding of how medical terms are created, pronounced, spelled and used in a medical setting. Classes will include a study of medical word roots, prefixes and suffixes common to the medical field. System terminology will focus on pathology, clinical procedures, laboratory procedures and abbreviations.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 1160: Legal Office Procedures

3.00 credits (2.00 lec/1 lab)

In this course, you will develop skills essential for work in a legal office. Your experience will include study of legal terminology, ethics and confidentiality, time and billing records, scheduling, court dates, depositions and appointments, maintaining client files, telephone techniques, and preparation of legal documents and legal correspondence. You will also study the three branches of government and the state and federal court systems.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BTEC 1165: Legal Transcription

3.00 credits (1.00 lec/2.00 lab)

In this course, you will use digital transcription software in transcribing dictated material for a legal office into usable documents. You will experience working with a wide variety of legal documents, develop speed and accuracy in transcribing, as well as acquire proofreading and correcting skills.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 1225: Professional Development

1.00 credit (1.00 lab)

This course is designed to develop your talents and abilities as effective group members and/or group leaders. You will examine student, professional, and local organizations and may assume organizational and planning responsibilities as a volunteer. You will meet three times as a group, and volunteer projects will be done independently with a final report presented to the group.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 1275: Medical Office Procedures

3.00 credits (2.00 lec/1.00 lab)

This course utilizes both classroom discussion and real-world simulation exercises to prepare you to perform the variety of tasks needed to work in a medical setting. Emphasis will be placed on customer service, legal and ethical responsibilities, and filing and handling correspondence. Discussions will also focus on making travel arrangements; planning meetings; discussing fees and credit; and performing banking, billing, and daily accounting, as well as preparing and processing insurance claims. Computer simulations using Medisoft software will be completed during this course.

Prerequisite/Corequisite: BTEC 1060.

BTEC 1700: Medical Insurance Coding

3.00 credits (3.00 lec)

This course is designed for individuals who are interested in pursuing a career in healthcare that allows them to assist physicians in assigning procedural and diagnostic codes in an outpatient setting. You will gain a working knowledge of both procedural and diagnostic coding systems, as well as gain hands-on experience assigning codes utilizing the CPT and ICD 9-CM code books.

Prerequisite: BTEC 1125.

BTEC 1770: Claims and Reimbursement

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to medical insurance reimbursement; medical insurance plans and payers; regulations and accreditation in medical insurance, as well as the claims processing sequence; collection of patient information; insurance verification; and encounter-form preparation. You will also learn about linkage and compliance, provider payment calculations, claims preparation and claims transmission. Coding guidelines will also be reviewed. The hospital claims and billing process will also be addressed. Computer simulations using Medisoft software will be covered during this course.

Prerequisite: BTEC 1700.

BTEC 1835: Business English

3.00 credits (3.00 lec)

In this course, you will develop business English skills appropriate for work in a professional business office; review and practice grammar usage, punctuation, and capitalization; and develop an extensive vocabulary emphasizing business and legal terms. Skills learned in this course will enable you to become a more effective business communicator.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

BTEC 2030: Business Presentations

2.00 credits (1.00 lec/1.00 lab)

This course covers the development of oral skills for the business professional with responsibilities for communicating technical material in an understandable manner. Building confidence and handling anxiety in pressure situations are stressed. Emphasis is placed on the value of listening as a vital part of business communication. Case studies are used to examine the ethical and legal responsibilities of a technical communicator. The use of technologies in giving effective presentations is included. You will consider how effective oral skills will enhance your career, as well as your personal life.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 2100: Microsoft Excel

3.00 credits (2.00 lec/1.00 lab)

This is a comprehensive course exploring the functions and practical applications in using Microsoft Excel spreadsheets to perform business and scientific calculations. Exercises include creating worksheets and charts and using financial database and problem-solving functions.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

BTEC 2110: Microsoft Access

3.00 credits (2.00 lec/1.00 lab)

In this course, you will use Access to develop the skills needed to create databases, edit and view data, perform queries, sort a database, and design and use basic forms and reports. Coursework will include advanced form, query, and report features, as well as the integration of Access with other Microsoft Office applications and the Internet.

Prerequisite: Basic computer skills.

BTEC 2125: Medical Terminology and Disease Condition 2

3.00 credits (3.00 lec)

This course is designed to follow Medical Terminology and Disease Condition 1. Classes will focus on system terminology, disease terminology and specialty terminology. Emphasis will also be placed on terminology related to clinical procedures, laboratory procedures, surgical procedures and medical abbreviations related to covered systems.

Prerequisite: BTEC 1125.

BTEC 2375: Written Business Communications

3.00 credits (3.00 lec)

In this course, you will develop the writing skills appropriate for business by composing and editing business memos, letters, and reports. You will use communication theory and critical thinking to solve business problems using effective writing, and apply this knowledge and skill in resolving your own personal business writing problems. Ongoing discussion and practice of correct grammar and punctuation usage is designed to heighten each writer's effectiveness. You will compile a portfolio of your written work, including a final research report. All assignments will be typed on the computer.

Prerequisites: Keyboarding skills; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 2450: Internship

2.00–4.00 credits (2.00–4.00 int)

The internship provides occupational experience in your major field. A training plan is developed for each student in cooperation with a supervisor at the training site. You will apply skills and knowledge acquired in coursework to an actual work setting. Internships require 40 hours of on-site training per semester credit.

BTEC 2730: The Professional Office

3.00 credits (3.00 lec)

This is a capstone course for BTEC students. The course will integrate skills and knowledge learned in previous business and computer applications courses. You will experience the demands and responsibilities of a professional office through simulations and visits to business offices. Emphasis will be placed on understanding professionalism and how a professional attitude and manner contribute to career success. Topics will include ethics in the workplace, working as a team member, the impact of superior customer service, business culture and environment, health and safety in the workplace, and leadership behaviors. You will also prepare a professional employment portfolio that demonstrates the skills and knowledge learned in your program of study.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 2775: Power Keyboarding

3.00 credits (1.00 lec/2.00 lab)

This course increases keyboarding performance through progressive skill building based on an individual's current levels. You will follow an individualized program based on diagnostic and prescriptive analysis. Must be taken A–F.

Prerequisite: BTEC 1060.

BTEC 2825: Career Management

2.00 credits (2.00 lec)

This course offers a highly individualized approach to developing career management skills. You will create résumés, write cover and thank-you letters, complete job application forms, utilize the Internet in their job search, and participate in an employment interview. Consideration will also be given to critical attitudes needed for career success.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

BTEC 2998: Directed Study

Prerequisites: One course in BTEC; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Central Services Technician

CSIP 1000: Role of the Central Services Technician

3.00 credits (2.00 lec/1.00 lab)

This course is designed for students interested in health-related careers. It prepares you to perform the role of Central Service Technician in such positions as Instrument Tech and Case Cart Tech. Foundational Anatomy and Physiology and basic principles of Microbiology will be presented. Course competencies include decontamination, preparation and packaging for sterilization, sterilization process, and sterile storage. Basic surgical instrumentation and medical terminology that is necessary for this area of employment in the healthcare setting will also be presented. The lab will include campus- and hospital-based practice settings. Upon completion of CSIP 1000 and 1002, students are eligible to take the certification exam from the Certification Board for Sterile Processing and Distribution, Inc. (CBSPD).

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 and ESOL 0033 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Corequisites: HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070, HCCC 1100.

CSIP 1002: Central Services Technician Internship

2.00 credits (2.00 int)

The 80-hour internship course prepares you for employment and to be become eligible for Central Services Technician certification. Through this practicum experience, you will become familiar with all aspects related to the central services of a hospital. The focus of this course is to provide you with comprehensive skills to be able to perform competently and safely. You will have hands-on practice sessions to develop the skills and techniques required in performing various activities in the central services areas. This course must be completed within one term of CSIP 1000.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; successful completion of the following: HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070, HCCC 1100; grade of "C" or better in CSIP 1000. Clear background check.
Corequisite: HCCC 1100 (only if enrolled in online section).

Chemistry

CHEM 1020: Introduction to Chemistry

4.00 credits (3.00 lec/1.00 lab)

This course is intended as a broad introduction to chemistry for the non-science major. Topics covered include the scientific method, atomic structure, the periodic table, bonding, acids and bases, nomenclature, equations, stoichiometry, gas laws, and oxidation and reduction. The lecture/theory portion of this course is offered both on campus in the classroom and as a Web course. This course includes two hours of required lab per week, which must be taken on campus. The laboratory introduces you to safe handling of chemicals, appropriate use of lab ware, and transcription of observations and data. Concurrent registration in lab is required, and attendance in the first week lab safety session is mandatory.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

CHEM 1040: Chemistry in Your Life

3.00 credits (3.00 lec)

This course offers an introduction to chemistry and its applications in one's personal life and modern society. The chemistry concepts covered include the structure of matter, elements and compounds, chemical bonding, reactions, energy changes, and an introduction to organic chemistry. You will consider and investigate the relevance of chemistry in everyday life—with a focus on many contemporary topics, such as environmental issues, energy resource issues, medicine, food and health, as well as consumer chemistry. The optional lab (CHEM 1041) is necessary for transfer as a lab science.

Fulfills MnTC Goal Areas 3 and 9.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060.

CHEM 1041: Chemistry in Your Life Lab

1.00 credit (1.00 lab)

This on-campus laboratory course examines concepts and topics raised in CHEM 1040 through lab activities and scientific investigation. During laboratory sessions, you will engage in activities that focus on air and water quality, food content, and pharmaceuticals, among many other chemistry-related topics.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060.

Prerequisite/Corequisite: CHEM 1040.

CHEM 1145: Forensic Science 1

4.00 credits (3.00 lec/1.00 lab)

This course uses an application-based approach to understand the basic theories and methods for scientific investigation of physical evidence found at the scene of a crime, with an emphasis on laboratory analysis methods currently in use. You will explore the scope of forensic science, services provided by forensic laboratories, the role of a forensic scientist, the processing of a crime scene, and the importance of as well as the types of physical evidence. You will learn how various kinds of physical evidence such as chemical substances, microscopic evidence, hair, fiber, paints, glass, soil, body fluids, DNA, fingerprints, etc. are collected and analyzed. You will perform several laboratory experiments to learn the methods used in such analyses. Concurrent registration in lab is required. Some lab sessions will be held off-campus.

Fulfills MnTC Goal Areas 3 and 9.

Prerequisites: Placement into MATH 0080 or completion of MATH 0070 and CHEM 1020 or one year of high school chemistry.

CHEM 1151: Principles of Chemistry 1

5.00 credits (3.50 lec/1.50 lab)

This course is the first semester of a two-semester sequence designed to give you a broad introduction to the field of chemistry. This course will cover a general introduction to the scientific method, basic stoichiometry, thermodynamics, atomic and molecular structure and bonding, gas laws, solution chemistry, and environmental topics. The required on-campus laboratory meets three hours per week. The laboratory experiments illustrate concepts covered in the lecture material, emphasize experimental techniques, and use computer-assisted data acquisition and manipulation. The lecture/theory portion of the course is offered on campus in the classroom and also as a Web course during some terms (check the term schedule).

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into MATH 1110 or completion of MATH 0080; CHEM 1020 or one full year of high school chemistry; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 09900 or ESOL 0051.

CHEM 1152: Principles of Chemistry 2

5.00 credits (3.50 lec/1.50 lab)

This course is the second semester of a two-semester sequence designed to give you a broad introduction to the field of chemistry. This course will cover solution chemistry, kinetics, acids and bases, equilibrium reactions, buffer solutions, solubility products, nuclear chemistry, thermodynamics, representative elements, transition metal chemistry, and environmental topics. The required on-campus laboratory meets three hours per week. The laboratory experiments illustrate concepts covered in the lecture material, emphasize experimental techniques, and use computer-assisted data acquisition and manipulation.

Fulfills MnTC Goal Area 3.

Prerequisites: CHEM 1151; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

CHEM 2204: Organic Chemistry 1

4.00 credits (4.00 lec)

This course is the first semester of a two-semester sequence that covers the synthesis, reactions, nomenclature and structure of organic compounds. Topics include chemical structure, kinetics and enthalpy of reactions, reaction mechanisms, stereochemistry; the syntheses and reactions of alkanes, alkenes, alkynes, conjugated systems, alcohols, ethers, aldehydes, and ketones; as well as NMR, IR, UV, and mass spectroscopy. Molecular modeling software is used during instruction to assist in visualizing reactions and is available for your use outside of class.

Fulfills MnTC Goal Area 3.

Prerequisites: MATH 0080; CHEM 1152 ("C" grade or above); placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

CHEM 2205: Organic Chemistry 2

4.00 credits (4.00 lec)

This course is the second semester of a two-semester sequence which covers the synthesis, reactions, nomenclature and structure of organic compounds, aromatic compounds, carboxylic acids, acid derivatives, amines, heterocycles, acetoacetic and malonic acid syntheses, carbohydrates, amino acids, proteins, lipids, polymers, industrial chemistry, agrochemical, and pharmaceuticals. Molecular modeling software is used during the lecture to visualize molecules and reactions and is available for your use outside of class.

Fulfills MnTC Goal Area 3.

Prerequisites: CHEM 2204; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

CHEM 2224: Organic Chemistry 1 Lab

2.00 credits (2.00 lab)

This course is the laboratory component that accompanies CHEM 2204: Organic Chemistry 1. The laboratory work consists of separation, purification, and identification techniques, both with ordinary chemical methods and with IR spectroscopy, gas chromatography, column chromatography, and refractive index instrumentation.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into MATH 1110 or completion of MATH 0080; CHEM 1152; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisites/Corequisite: CHEM 2204.

CHEM 2225: Organic Chemistry 2 Lab

2.00 credits (2.00 lab)

This course is the laboratory component that accompanies CHEM 2205: Organic Chemistry 2. The laboratory work consists of syntheses, purification, and reactions of organic compounds and unknown identification, both with ordinary chemical methods and with IR spectroscopy, gas chromatography, column chromatography, and refractive index instrumentation.

Fulfills MnTC Goal Area 3.

Prerequisites: CHEM 2204, CHEM 2224; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: CHEM 2205.

CHEM 2410: Analytical Chemistry and Instrumentation Theory

3.00 credits (3.00 lec)

This lecture course introduces the principles of analytical methods and instrumentation. You will learn the theories of various chemical and biochemical methods of analyses. You will explore the principles of ionic equilibria, acid-base, complexometric, redox and electro analytical techniques. You will gain an understanding of various instruments, including spectroscopic and chromatographic methods. You will appreciate the application of analytical chemistry in meeting the regulatory requirements of the Food and Drug Administration and Environmental Protection Agency in a variety of industrial and research applications. You will learn about HVAC requirements in clean room environments and develop the necessary skills to document and statistically analyze data.

*Prerequisite: CHEM 1152.**Prerequisites/ Corequisites: BIOT 2320 and all Prerequisites/ Corequisites for these courses apply.***CHEM 2420: Analytical Chemistry and Instrumentation Laboratory**

2.00 credits (2.00 lab)

This laboratory course will use an applications-based approach to chemical and biochemical methods of analyses. You will carry out classical analytical techniques as well as instrumental methods of analysis. You will incorporate mathematical calculations, statistical analysis of data and computational methods. You will apply aqueous ionic equilibria principles, explore a compendium of methods and adopt various instrumentation methods including chromatography and spectrometry. You will explore analytical methods and standards important in quality control in regulatory environments. You will learn to do detailed work with precision and accuracy. You will incorporate documentation procedures and validation principles according to regulatory affairs standards.

*Prerequisite: CHEM 1152.**Prerequisites/Corequisites: CHEM 2410 and BIOT 2320; all Prerequisites/Corequisites for these courses apply.***CHEM 2610: Biochemistry – Theory and Principles**

3.00 credits (3.00 lec)

This course introduces the fundamental principles in biochemistry. You will learn the structure and function of biomolecules, kinetics of enzyme-catalyzed reactions, major metabolic pathways that synthesize and degrade biomolecules, and the storage and transmission of genetic information in organisms.

*Prerequisites: BIOL 2200, CHEM 1152 and CHEM 2204; all prerequisites/corequisites for these courses apply.***CHEM 2620: Biochemistry Laboratory**

2.00 credits (2.00 lab)

This laboratory course will use an application-based approach to biochemical techniques. You will apply the concepts learned in the biochemistry theory course to gain experience in protein purification and characterization, modern molecular biology techniques, enzyme kinetics and immunological techniques. You will extensively utilize biochemical techniques and instrumentation widely used in academic and industry laboratories, apply the regulatory affairs standards, and document your work as per these standards.

*Prerequisites/Corequisites: BIOT 2320, CHEM 2420 and CHEM 2610.***CHEM 2720: Undergraduate Research Methods**

1.00 credits (1.00 lec)

This lecture course will provide you with the opportunity to learn research methods and processes. You will find and retrieve primary scientific literature relevant to your interest in chemistry, biochemistry or biotechnology, or other related fields, effectively and efficiently. You will learn to use library resources and literature databases. You will write a literature review critically evaluating information and its sources and use the information effectively to write a research proposal on a chosen topic. You will summarize a research seminar you attend in the course and will participate in a field-trip to the University of Minnesota libraries. Must be taken A–F.

*Prerequisites/Corequisites: CHEM 2410 or CHEM 2610 or BIOL 2500 or instructor permission.***CHEM 2721: Undergraduate Research Lab**

2.00 credits (2.00 lab)

This course will provide you with the opportunity to carry out undergraduate research related to chemistry, biochemistry or biotechnology applications. You will learn about research methods and processes. You will write a literature review critically evaluating information and its sources and use the information effectively to write research proposal on a chosen project approved by the instructor. You will carry out the proposed project under the supervision of the instructor in the laboratory. You will learn to do detailed laboratory work accurately and with precision, incorporating good laboratory practices, documentation procedures and regulatory affairs standards. You will develop analytical and data management skills and gain exposure to concepts such as validity, reliability, measurement, and bias. Upon completion of the project, you will write a short thesis and defend your thesis. You will explore the possibilities of publishing the results.

*Prerequisites/Corequisites: BIOT 2720 or CHEM 2720; and CHEM 2420 or CHEM 2620 or BIOL 2500 AND instructor approval.***CHEM 2998: Directed Study**

Prerequisites: One course in CHEM; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Child Development

CHDV 1004: Working with Children During Out-of-School Time

3.00 credits (3.00 lec)

This foundational course introduces you to career opportunities working with school age children (5–12) during out-of-school time. The course will examine the roles of providers for school-age children, basic program elements and regulations, professionalism and current issues. You will increase your understanding of national standards and the skills necessary to successfully work with school-age children in an out-of-school-time program.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1150: Mentoring the Urban Child

2.00 credits (2.00 lec)

This course offers an opportunity to enrich a young person's life through mentoring. Through collaboration with Big Brothers Big Sisters, you will be matched with a 6 to 13-year-old attending the Interdistrict Downtown School (IDDS), meeting with him or her at IDDS for an hour each week at a prearranged time based on each student's schedule. In addition, weekly course lectures and discussion occur online. You will examine the role of a mentor, the mentoring process, the urban context, developmental assets, bridging differences, boundaries and limit setting, and issues that offer come up in mentoring urban children and youth. No experience with children is necessary. You will need to complete a thorough application process through Big Brothers Big Sisters prior to the first week of class.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

CHDV 1220: Child Safety, Health and Nutrition

3.00 credits (3.00 lec)

This course guides you in obtaining skills needed to establish and maintain a physically and psychologically safe and healthy learning environment for young children. Topics include preventing illness and accidents; handling emergencies; providing health, safety, and nutritional education experiences; meeting children's basic nutritional needs; understanding the teachers' responsibility with respect to therapeutic drugs, which might be prescribed for children in their care; current health-related issues; and recognition and implications of child abuse and neglect.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

CHDV 1240: Caregiving and Teaching Strategies

3.00 credits (2.00 lec/1.00 lab)

This course examines the role of the teacher in early childhood settings. It applies knowledge of child development as it relates to individual children, communities, curriculum and communication activities.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052. *Prerequisites/Corequisites:* CHDV 1215 or instructor approval.

CHDV 1244: Creating Environments for School-Age Children

3.00 credits (3.00 lec)

This course provides you with an introduction to arranging the physical environment to meet the developmental needs of school-age children in afterschool and out-of-school-time programs. You will learn how to arrange furniture, select and organize materials, plan the daily schedule, and manage transitions.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1505: Professional Relationships for Early Childhood Educators

3.00 credits (3.00 lec)

This course explores the relationship among the early childhood professional, the child, the child's family, the local community and professional colleagues. You will explore cultural diversity among families and identify strategies to establish and maintain open, positive, and collaborative relationships. You will also examine methods to build and maintain collaborative relationships with the teaching team and other professionals within the educational setting.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

CHDV 1540: Infant-Toddler Development and Learning Experience

3.00 credits (2.00 lec/1.00 lab)

This course provides an overview of infant/toddler theory and development in home- and center-based settings. You will integrate knowledge of developmental needs, developmentally appropriate environments, effective caregiving and teaching strategies, and observation methods.

Prerequisites: CHDV 1215 or instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1545: Learning Experiences

3.00 credits (2.00 lec/1.00 lab)

This course provides an overview of mixed-age theory and development for in-home or center-based settings. You will integrate knowledge of developmental needs, developmentally appropriate environments, effective caregiving, teaching strategies and observation methods.

Prerequisites: CHDV 1240 or instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1600: Practicum 1

2.00 credits (2.00 int)

This course provides an opportunity to work with children from diverse backgrounds in an urban early-childhood-education setting. You will observe and assess children's development, establish relationships, assist with caregiving routines, facilitate learning through play, plan and implement activities, and maintain professional relationships. Each week, you will spend six hours in an early-childhood classroom.

Prerequisites: Child Development Certificate or instructor approval.

CHDV 1610: Professional Relationships Seminar

2.00 credits (2.00 lec)

This course helps early-childhood staff develop the skills to be successful employees and members of a teaching team. You will examine interpersonal communication, group dynamics, group decision-making, conflict resolution, wage issues, job stress, workplace diversity and job-seeking skills.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1640: Literature, Language and Literacy for Young Children

3.00 credits (3.00 lec)

This course provides an overview of language- and literacy-learning experiences in either home- or center-based settings. You will integrate knowledge of child development, learning environments, and teaching methods to promote literacy skills in speaking, listening, reading, and writing.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1641: Seeds of Emerging Literacy

1.00 credit (1.00 lec)

This course is intended to introduce the concept of "emergent literacy" to paraprofessionals in the public schools and to childcare providers. It provides information about implementing a literacy-rich classroom for young children. You are expected to think critically about the impact of curriculum experiences, classroom organization and the role of the teacher as the "architect" of learning opportunities on the emergent literacy skills of children.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1642: Social, Emotional and Moral Development Experiences

3.00 credits (3.00 lec)

This course provides an overview of social, emotional, and moral learning experiences in home- and center-based settings. You will integrate knowledge of child development, learning environments, and teaching methods to promote children's emotional development, moral development, self-concept, self-esteem, social skills, diversity awareness, social studies, altruism, and moral responsibility.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1644: Creative Development Experiences

3.00 credits (3.00 lec)

This course provides an overview of creative/aesthetic learning experiences in home- and center-based settings. You will integrate knowledge of child development, learning environments, and teaching methods to promote children's artistic, musical, movement, and dramatic abilities.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1650: Peaceful Classroom

3.00 credits (3.00 lec)

This course provides an overview of the effects of violence on the development and behavior of young children. You will explore elements to be incorporated into a peaceful classroom and identify behavioral intervention. You will also address challenging behaviors and create activities and materials to foster peacemaking skills in children.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1652: Sensory Motor Development Experiences

3.00 credits (3.00 lec)

This course provides an overview of sensory-motor learning experiences in either home- or center-based settings. You will integrate knowledge of child development, learning environments, and teaching methods to promote children's sensory, fine motor, gross motor, perceptual-motor, and self-care skill development.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1654: Math, Science and Technology for Early Childhood

3.00 credits (3.00 lec)

This course provides an overview of cognitive and multimedia learning experiences in home- and center-based settings. You will integrate knowledge of child development, learning environments, and teaching methods to promote children's curiosity, attention, perception, memory, problem-solving, logical thinking, and media literacy.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CHDV 1656: Culturally Relevant/Antibias Education

3.00 credits (3.00 lec)

This course provides an overview of culturally relevant and antibias education in early childhood settings. You will examine the major approaches to culturally relevant/antibias education, evaluate and make teaching materials, plan and implement culturally relevant/antibias learning experiences, and plan culturally relevant/antibias curriculum. This course is also taught online.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

CHDV 1744: School-Age Activities

4.00 credits (4.00 lec)

This course provides you with an overview of activities for school-age children in out-of-school-time settings, integrating your understanding of developmentally effective approaches to teaching and learning by designing, implementing, and evaluating activities that promote positive development of the whole child.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1749: Topics in Parenting

1.00 credit

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1775: Supporting Reading Skills in School-Age Children

1.00 credit (1.00 lec)

This course provides an overview of the developmental progression of reading skills in young children. You will have the opportunity to explore strategies and materials that may be used by paraprofessionals to support and extend the reading skills of children in a public school setting.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1777: Supporting Writing Skills in School-Age Children

1.00 credit (1.00 lec)

This course provides an overview of the developmental progression of writing skills in young children. You will have the opportunity to explore strategies and materials that may be used by paraprofessionals to support and extend the writing skills of children in a public school setting.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 1779: Supporting Math Skills in School-Age Children

1.00 credit (1.00 lec)

This course provides an overview of the developmental progression of math skills in young children. You will have the opportunity to explore strategies and materials that may be used by paraprofessionals to support and extend the math skills of children in a public school setting.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 2444: School-Age Program Planning

3.00 credits (3.00 lec)

This course examines the curriculum of quality school-age and out-of-school-time programs. You will explore many forms of program planning and will develop the tools you need to organize and evaluate yearly, seasonal, monthly, and long-term activity plans.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CHDV 2500: Professional Leadership

3.00 credits (3.00 lec)

This course prepares you to take an active/advocate role in the child-development profession by examining the history, current trends, and future of childcare and early childhood education.

Prerequisites: Child Development Diploma or instructor approval.

CHDV 2545: Curriculum Planning

3.00 credits (3.00 lec)

This course provides an advanced level exploration of curriculum planning for teachers of young children. Emphasis is on organizing, implementing, and evaluating a quality, comprehensive, integrated, and inclusive early childhood program.

Prerequisites: Child Development Diploma or instructor approval.

CHDV 2600: Practicum 2

3.00 credits (3.00 int)

This course provides an opportunity to apply knowledge and skill in an early childhood setting. You will implement a variety of learning experiences that are developmentally appropriate for, and culturally sensitive to, a specific age and group of children. Each week, you will spend nine hours in an early childhood classroom.

Prerequisites: Child Development Diploma or instructor approval.

CHDV 2998: Directed Study

Prerequisites: One course in CHDV and instructor approval.

Chinese

CHIN 1000: Beginning Chinese 1

5.00 credits (5.00 lec)

This course is a comprehensive introduction to Mandarin Chinese. You will learn the pronunciation system, character writing and basic skills in listening, speaking, reading and writing; master standard pronunciation, the four tones, basic grammatical patterns, and vocabulary that is highly relevant to a beginning Chinese learner; lay a firm foundation for their future study of Chinese and be able to function in a Chinese-speaking environment. You will accomplish these goals not only with the language skills, but also with Chinese cultural awareness.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

CHIN 1100: Beginning Chinese 2

5.00 credits (5.00 lec)

This course is a continuation of Chinese 1000. You will further develop standard pronunciation, the four tones, basic grammatical patterns and practical vocabulary; have a better and deeper understanding of the language and the culture; be able to recognize and write about 600 Chinese characters, write short essays, and have conversations with native Chinese speakers about yourself, your family, and other everyday topics; and be ready for intermediate study in Chinese.

Fulfills MnTC Goal Area 8.

Prerequisites: CHIN 1000; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

CIPR 1102: Cinema Production 2

3.00 credits (2.00 lec/1.00 lab)

This course examines narrative structure and conventions in cinematic storytelling. You will learn advanced production methods, postproduction techniques, basic motion graphics and the elements of both visual structure and sound design. You must work collaboratively as well as individually throughout the semester.

Prerequisites: Admission to the Cinema Division; placement into READ1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIPR 1103: Sound for Image

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to sound as it relates to the moving image. You will learn the fundamental nature of sound, basics of location and studio recording; and general principles involved in creating, manipulating, and mixing audio tracks. You will complete individual exercises in the sound suites, culminating in the creation, recording and final mix-down of an original sound track.

Prerequisites: Admission to the Cinema Division; placement into READ1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIPR 1104: Advanced Production Lab

3.00 credits (3.00 lab)

This lab is intended to provide you with the opportunity to produce specifically designed projects to complement your knowledge and experience, collaborate with your peers as a crew member on their works, and critique and analyze the ongoing productions. You will be required to make a plan and complete your project as agreed upon with the instructor.

Prerequisite: CIPR 1101.

Cinema Production

CIPR 1101: Cinema Production 1

3.00 credits (2.00 lec/1.00 lab)

This course provides a working introduction to the aesthetic and technical aspects of cinema production. Using 16mm film and digital media, you will design, shoot and edit several short projects. You will be introduced to the role of computers in the digital, nonlinear, postproduction environment.

Prerequisites: Admission to the Cinema Division; placement into READ1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

Cinema Studies

CIST 1101: Cinema History 1

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to the history, theory, and criticism of cinema from its origins in the silent era through the sound era of classical Hollywood, German expressionism, Russian montage, and French poetic realism. You will examine cinema as a unique art in the context of other arts and the American and European social milieux. You will also interpret films in terms of their historical positions, national origins and aesthetics.

Fulfills MnTC Goal Area 6

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

1 lecture (lec) credit = 50 minutes of class time per week | 1 lab credit = 100 minutes of class time per week | 1 internship (int) = 150 minutes of on-site training time per week

CIST 1102: Cinema History 2

3.00 credits (2.00 lec/1.00 lab)

This course is a study of the history of film language and style. You will begin with the transition from the classical studio system to American film noir, Italian neorealism, French new wave, new German cinema, international co-production and the contemporary American independents. You will also focus on analysis and interpretation of films that are representative of evolving national traditions of cinema, with recognition of their divergent cultural milieus.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIST 1103: World Cinema History

3.00 credits (2.00 lec/1.00 lab)

This course explores classic and contemporary films created by the most influential filmmakers throughout the world. These films will allow you to examine the cross-pollination between traditional Hollywood cinema and various international film movements. To better understand how film shapes our perceptions of other cultures, you will analyze the social, cultural and political dynamics involved in making and viewing these films.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIST 1104: Documentary History

3.00 credits (2.00 lec/1.00 lab)

This course explores the history, theory, and practices of documentary film and video, tracking the genre from the actuality films of the early 1900s through the present-day resurgence in documentary film and video. You will examine what constitutes a documentary, analyzing the fundamental aesthetic tools of documentary filmmaking (camera, sound, structure, and interviewing,) as well as the role of technology in the current democratization of the genre.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIST 1105: Topics in Cinema History

3.00 credits (2.00 lec/1.00 lab)

This course provides an opportunity to study in depth a variety of cinema topics. Possible topics include studies of directors, genres, and national cinemas, as well as different cinematic perspectives (gender, race, ethnicity, history, literature, theatre, art and music).

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

CIST 1106: History of Photography

3.00 credits (3.00 lec)

This course explores developments in technology, aesthetics, and cultural significance of photography from its origins to the present. You will examine the works of major photographers and the relationships of those works to history, art and commerce. Must be taken A-F.

Fulfills MnTC Goal Area 6 and 8.

Cinematography

CINE 2103: Camera and Lighting

4.00 credits (3.00 lec/1.00 lab)

This course provides an in-depth study of advanced camera and lighting systems used in cinema production. Using these technologies, you will become adept in the art and craft of cinematography through exercises and camera tests involving lighting setups, lens choices, camera movement, special effects and other tools of the industry. You will learn the choices and decisions the cinematographer must make in service to the production.

Prerequisite: Completion of the Cinema Production Certificate.

Corequisite: CINE 2104.

CINE 2104: Cinematography 1

4.00 credits (3.00 lec/1.00 lab)

This course explores the cinematographer's role in a motion picture production. You will study and practice the relationship with the director and other members of the crew through the production of a short film. You will also learn other aspects of working with a crew, including the roles of assistant camera and gaffer.

Prerequisite: Completion of the Cinema Production Certificate.

Corequisite: CINE 2103.

CINE 2105: Cinematography 2

4.00 credits (3.00 lec/1.00 lab)

This course applies the aesthetic and technical knowledge introduced in CINE 2104 toward a complete production in collaboration with a director. You will implement advanced style and production techniques to the course projects, producing a professional Cinematographer's Reel as a capstone project.

Prerequisite: Completion of the Cinema Production Certificate.

CINE 2107: Internship

3.00 credits (1.00 int/2.00 lab)

This course provides an opportunity to work in a production facility or on a set. Your internship placement will reflect your personal aesthetics in cinematography. You must obtain your internship coordinator's approval in advance of internship. Placement is limited to program students.

Prerequisites: Completion of the Cinema Production Certificate.

CINE 2998: Directed Study

Prerequisite: Completion of the Cinema Production Certificate.

Cinema: Digital Animation

ANIM 2101: Introduction to Digital Animation

3.00 credits (2.00 lec/1.00 lab)

This course provides introductory three-dimensional, computer-based animation experiences. Output will be in digital file formats. You will study basic 3D modeling and animation as you develop skills, functional knowledge and techniques through lecture, demonstration, completion of regular assignments and final projects. Must be taken A-F.

Prerequisites: Completion of the Cinema Production Certificate.

ANIM 2102: Advanced 3D Animation

4.00 credits (3.00 lec/1.00 lab)

This course covers advanced three-dimensional cinematic issues, including modeling, animating, rendering and outputting computer-generated animation files. You will use a variety of software packages to explore 3D animation used extensively in multimedia, TV and cinema productions. Must be taken A-F.

Prerequisite: ANIM 2101.

Corequisites: ANIM 2103, ANIM 2104.

ANIM 2103: Advanced CGI Software

4.00 credits (3.00 lec/1.00 lab)

This course introduces advanced software in Animation and Special Effects. You will study alternative Computer Graphic Imaging (CGI) software and specialized CGI tools, and you will produce a final animation using these tools. You will focus on advanced modeling technologies and animation techniques. Must be taken A-F.

Prerequisite: ANIM 2101.

Corequisite: ANIM 2102, ANIM 2104.

ANIM 2104: Animation-Advanced Project

4.00 credits (3.00 lec/1.00 lab)

This course applies the aesthetics and technical knowledge introduced in previous courses. You will participate in a production in collaboration with a director and an editor. You will implement advanced animation techniques to the projects over the semester and produce a professional reel as a capstone project. Must be taken A-F.

Prerequisite: ANIM 2101.

Corequisite: ANIM 2102, ANIM 2103.

Cinema: Directing and Producing

DREC 2103: Producing Independent Cinema

4.00 credits (3.00 lec/1.00 lab)

This course introduces you to business practices as they apply to the video, film, sound and music industries. Securing rights and copyrights, royalties, music and sound industries, financing, grant writing and budgeting will be covered. You will create film and video proposals, business structures, small business operations and perform basic accounting. You will also master operations such as preproduction and prepping, scheduling, production, postproduction, scoring and mixing, as well as get an introduction to the business of marketing, distribution, job interviews and employment possibilities.

Prerequisite: Completion of the Cinema Production Certificate.

DREC 2104: Directing 1

4.00 credits (3.00 lec/1.00 lab)

This course introduces you to directing for the camera based on the production foundation created in the first two semesters. You will learn the central aspect of the director's craft—cinematic staging—where acting, camera work, and editing intersect; and you will supervise cast and crew efforts and lead them toward a common objective—a work of unified vision and expression. Scene studies, screenings, discussions, readings and collaborative production assignments (with Screenwriting, Cinematography and Editing students as well as actors), will provide an understanding of the director's role in narrative fiction work.

Prerequisite: Completion of the Cinema Production Certificate.

DREC 2105: Directing 2

4.00 credits (3.00 lec/1.00 lab)

Directing 2 is the final production course for Directing majors in the Cinema Division. You will plan, produce, and direct projects based on previously learned aesthetic and technical knowledge. You will collaborate with Screenwriting, Cinematography and Editing students on all projects.

Prerequisite: Completion of the Cinema Production Certificate.

DREC 2106: Documentary Production

4.00 credits (3.00 lec/1.00 lab)

This course focuses exclusively on producing documentary work. You will research, produce and edit short documentary exercises during the semester, learning to distinguish the documentary genre from other forms of nonfiction audio-visual expression. You will turn complex social issues and subjects into compelling documentary stories through screenings, readings, lectures, research, discussions and collaborative work.

Prerequisite: DREC 2104.

DREC 2107: Internship

3.00 credits (3.00 int)

The internship provides second-year program students with an opportunity to work in a professional film or video production facility. Internship placement will be supervised by the program internship coordinator and will reflect the individual student's personal direction in filmmaking. You will produce a final report at the end of the internship. On-site internship supervisor's approval must be obtained in advance of enrollment. NOTE: The internship is available only to degree students.

Prerequisites: DREC 2104.

DREC 2998: Directed Study

Prerequisite: Completion of a DREC course.

Cinema: Editing and Post Production

EDIT 2103: Postproduction

4.00 credits (3.00 lec/1.00 lab)

This course introduces the basic aspects of film and video postproduction. You will complete the final steps of an edited film or video project and prepare it for distribution. Through this process, you will learn how to work effectively with a film director and conceive a professional workflow for a specific project. You will also take a field trip to a postproduction house to acquire knowledge of state-of-the-art services available in the community.

Prerequisite: CIPR 1102 and completion of the Cinema Production Certificate.

Corequisite: EDIT 2104.

EDIT 2104: Editing 1

4.00 credits (3.00 lec/1.00 lab)

This course introduces the basics of the technical and aesthetic aspects of editing motion pictures. You will learn professional editing software such as Final Cut Pro software, the process and language of editing, the Editor/Director relationship and you will complete several edited projects.

Prerequisite: CIPR 1102, SCRN 1101, and completion of the Cinema Production Certificate.

Corequisite: EDIT 2103.

EDIT 2105: Editing 2

4.00 credits (3.00 lec/1.00 lab)

This course explores advanced editing technical and aesthetic issues introduced in EDIT 2104. You will analyze the work of a diverse group of master film editors; learn strategic approaches to different types of editing and compositing. You will complete several advanced editing projects and create an editor's reel.

Prerequisites: EDIT 2103, EDIT 2104, and completion of the Cinema Production Certificate.

EDIT 2107: Internship Lab

3.00 credits (1.00 int/2.00 lab)

This internship provides second-year editing students with an opportunity to work in the industry. During the internship, you will work with local and national film and video organizations and postproduction houses. Internships are only available to degree students.

Prerequisites: EDIT 2104 and completion of the Cinema Production Certificate.

EDIT 2998: Directed Study

Prerequisite: Completion of the Cinema Production Certificate.

Cinema: Screenwriting

SCRN 1101: Introduction to Cinematic Storytelling

3.00 credits (3.00 lec)

This course provides an introduction to the basic elements of fictional cinematic storytelling with an emphasis on the techniques and craft that distinguish screenwriting from other forms of writing. You will complete a series of specific scripted scenes using the master scene screenwriting format and implementing such elements as character, mood and rhythm.

Prerequisites: Admission to the Cinema Division. Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

SCRN 1102: Writing the Short Fiction Screenplay

3.00 credits (2.00 lec/1.00 lab)

Drawing heavily on the basics learned in Screenwriting 1101, this class will examine advanced storytelling techniques and the specific art of dialogue writing. You are expected to develop, draft and rewrite a short fiction script.

Prerequisites: SCRN 1101; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

SCRN 2103: Script Analysis and Structure

4.00 credits (3.00 lec/1.00 lab)

This class will focus mainly on mastering the dramatic structure through a combination of lectures, scene rewritings from specific movies, a thorough analysis of professional screenplays and a precise evaluation/ comparison of the movies based on those same screenplays. You are expected to analyze two complete professional scripts and rewrite several scenes from produced features.

Prerequisites: Admission to the Cinema Division. SCRN 1102; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills

Corequisite: SCRN 2104.

SCRN 2104: Writing Nonfiction Scripts

4.00 credits (3.00 lec/1.00 lab)

This class focuses on learning the other non-narrative forms and structures of screenwriting: documentary, television, industrial, corporate, educational, training, animation, commercials, news, and the alternative markets. You are expected to develop and complete several short nonfiction scripts.

Prerequisites: Admission to the Cinema Division. SCRN 1102; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

Corequisite: SCRN 2103.

SCRN 2105: Writing the Fictional Feature-Length Script

4.00 credits (3.00 lec/1.00 lab)

This class introduces you to the dramatic fictional feature-length screenplay. You will research, develop, plot, structure and draft a feature-length fictional script, through all the required professional steps: ideation, characterization, synopsis, treatment, breakdowns, etc. A finished draft is required for graduation.

Prerequisites: SCRN 2103 and SCRN 2104.

Corequisite: SCRN 2106.

SCRN 2106: Screenwriting Practicum

4.00 credits (3.00 lec/1.00 lab)

This course focuses on three major activities: exploring the fundamental principles and the legal aspects of the business as they relate to the screenwriting profession; analyzing the feature scripts developed in SCRN 2105 and their structure; and learning how to orally pitch a feature idea or a script to professionals. Using concepts from classical and contemporary dramatic structures, you will learn how to write, rehearse and pitch their scripts to professionals from New York or Los Angeles.

Prerequisites: SCRN 2103 and SCRN 2104.

Corequisite: SCRN 2105.

SCRN 2107: Internship Lab

3.00 credits (1.00 int/2.00 lab)

This internship connects you with local organizations such as The Minnesota Film and Television Board, The Independent Feature Project Minnesota, The Screenwriters Workshop, the McKnight Foundation and other local film and video organizations. You will participate for one semester in the industry as Reader/Story Analyst, write professional coverages for original scripts and get the unique chance to participate in the preproduction of local and national cinema projects filmed in town. Internships are available only to second-year degree students and may be repeated.

Prerequisites: SCRN 2103 and SCRN 2104.

SCRN 2998: Directed Study

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills. An application for entrance is required to register into the Cinema Division.

Cinema: Sound for Cinema

SNDC 2101: Production Sound for Motion Pictures

4.00 credits (3.00 lec/1.00 lab)

This course introduces techniques used in the acquisition of sound for motion pictures. You will learn how to record and mix for live sound and how to use single and double system and multi-track recording for pictures. You will complete specific sound assignments in class and participate in the advanced students' Cinema productions. Must be taken A-F.

Prerequisites: Completion of the Cinema Production Certificate.

Corequisite: SNDA 1310.

SNDC 2102: Post-Production Sound for Motion Pictures

4.00 credits (3.00 lec/1.00 lab)

This course introduces advanced workflows for Post-Production sound. You will learn to use professional Digital Audio Workstation (DAW) software, advanced plug-ins and effects, and Automated Dialogue Replacement (ADR) techniques. You will study the theories of editing and mixing audio in stereo and surround environments. You will complete assignments in class and participate in advanced Cinema productions. Must be taken A-F.

Prerequisites: SNDC 2101, SNDA 1310.

Corequisite: SNDC 2103.

SNDC 2103: Advanced Sound for Cinema Project

4.00 credits (3.00 lec/1.00 lab)

This course utilizes the aesthetics and technical knowledge introduced in prerequisite courses. You will participate in a cinematic sound production in collaboration with a director and an editor. You will implement advanced techniques to the projects over the semester and produce a professional reel as a capstone project. Must be taken A-F.

Prerequisites: SNDC 2101, SNDA 1310.

Corequisite: SNDC 2102.

Cinema: Visual Effects

CVFX 2101: Visual Effects 1 — Motion Graphics

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to the field of Motion Graphics, also known as compositing. You will design and build short animated sequences utilizing 2D and 3D planes to achieve specific objectives required by a script. You will use industry-standard Adobe and Apple software and select production pipelines and output options. Must be taken A-F.

Prerequisites: Completion of the Cinema Production Certificate.

Corequisite: CVFX 2102.

CVFX 2102: Visual Effects II — Compositing in the Postproduction Environment

4.00 credits (3.00 lec/1.00 lab)

This course provides experience and guidance in the integration of traditionally acquired cinema footage with VFX (Visual Special Effects). You will use techniques such as Green-Screen/Blue-Screen compositing, camera solving, and advanced nodal effects-trees. Must be taken A-F.

Prerequisites: Completion of the Cinema Production Certificate.

Corequisite: CVFX 2101.

CVFX 2103: Visual Effects III — Stereoscopy

This course provides practical, hands-on production experience in the growing realm of digital 3D, stereoscopic cinema. Must be taken A-F.

Prerequisites: CVFX 2101, CVFX 2102.

Corequisite: CVFX 2104.

CVFX 2104: Visual Effects Advanced Project

4.00 credits (3.00 lec/1.00 lab)

This course utilizes the aesthetics and technical knowledge introduced in prerequisite courses. You will participate in a cinematic VFX production in collaboration with a director and an editor. You will employ advanced techniques in projects over the semester as well as produce a professional reel as a capstone project. Must be taken A-F.

Prerequisites: CVFX 2101, CVFX 2102.

Corequisite: CVFX2103.

Community Health Worker

CMHW 1000: The Community Health Role: Advocacy and Outreach

3.00 credits (2.00 lec/1.00 int)

This course focuses on the role of the community health workers' personal safety, self-care, personal wellness, and the promotion of health and/or disease prevention of clients. Course includes classroom and internship field work.

Prerequisites: Placement into READ 0200 or ESOL 0052

or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent.

Clear background check.

CMHW 1015: Organizations and Resources: Community and Personal Strategies

2.00 credits (1.00 lec/1.00 int)

The course focuses on the community health worker's knowledge of the community and the ability to prioritize and organize work. Emphasis is on the use and critical analysis of resources and problem-solving.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent. *Clear background check.*

Corequisite: CMHW 1000.

CMHW 1025: Community Health Worker's Role in Teaching and Capacity-Building

2.00 credits (2.00 lec)

This course focuses on the community health worker's role in teaching and increasing capacity of the community and of the client. Emphasis is on establishing healthy lifestyles and clients developing agreements to take responsibility for achieving their health goals. You will learn and practice methods for planning, developing and implementing plans with clients to promote wellness.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent.

Corequisite: CMHW 1000.

CMHW 1035: The Community Health Worker: Legal and Ethical Responsibilities

1.00 credit (1.00 lec)

This course focuses on the legal and ethical dimensions of the community health worker's role. You will study the boundaries of the community health worker position, agency policies, confidentiality, liability, mandatory reporting, and cultural issues that can influence legal and ethical responsibilities.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent.

Corequisite: CMHW 1000.

CMHW 1045: Community Health Worker: Coordination, Documentation and Reporting

1.00 credit (1.00 lec)

This course focuses on the importance and ability of the community health worker to gather, document and report on client visits and other activities. The emphasis is on appropriate, accurate and clear documentation with consideration of legal and agency requirements.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent.

Corequisite: CMHW 1000.

CMHW 1055: Communication Skills and Cultural Competence

2.00 credits (2.00 lec)

This course provides the content and skills in communication to assist community health workers in effectively interacting with a variety of clients, their families, and a range of healthcare providers. You will learn about communicating verbally and nonverbally, listening and interviewing, networking, building trust, and working in teams. You will practice communication skills in the context of a community's culture and the cultural implications that can affect client communication.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 and ESOL 0033 or equivalent.

Corequisite: CMHW 1000.

Computer Literacy

COML 1000: Computer Literacy Basics

1.00 credit (1.00 lab)

This course is intended for those students with keyboarding skills but with little or no computer experience. It covers basic computer topics that are essential for the use of computers in all fields of study. Topics covered include: basic computer hardware, applications software, and systems software terminology; operating system basics; word-processing basics; and communications and email.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

COML 1100: Computer Literacy Basics with Keyboarding

2.00 credits (1.00 lec/1.00 lab)

This course is intended for those students with little or no computer experience or keyboarding skills. It covers basic computer topics essential for the use of computers in all fields of study, as well as efficient keyboarding for the successful college student. Topics covered include alphabetic and numeric keyboards for use in basic formatting; basic computer hardware; applications software and systems software technology; operating systems basics; word-processing basics; and communications and email.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Computer Science

CSCI 1050: Designing Web Pages

3.00 credits (3.00 lec)

In this course, you will learn the basics of webpage design and how to publish webpages on the Internet. You are introduced to Hyper Text Markup Language (HTML), and learn how to design webpages using an HTML editor program. You will learn and use FrontPage 2003 to create a functional website and learn to upload content using a file-transfer program.

Prerequisites: An introduction to the Internet class or workshop, OR experience with Windows or Mac operating systems AND experience using a Web browser such as Netscape or Microsoft Explorer; placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CSCI 1100: Introduction to Computers

3.00 credits (3.00 lec)

This course is designed to provide a basic understanding of computer concepts and applications and to show how computers are used in the home, business, and organizations. Topics will include essential concepts of computers, the Internet, software basics, multimedia, files and storage, computer architecture, ethics, and current trends. You will use e-mail and the Internet and gain hands-on experience using computer applications for word processing, spreadsheets, file organization, databases, and presentation graphics in the Microsoft environment using Word, Excel, Access, and PowerPoint.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; keyboarding skills recommended.

CSCI 1200: Computer Applications in Home and Business

3.00 credits (3.00 lec)

This intermediate-level course builds on fundamental computing skills and concepts. You will use the productivity tools and features of Microsoft Office software to solve problems and to create documents, databases, spreadsheets and presentations needed for other college courses or personal and professional use. You should have previous computer experience and keyboarding skills.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; CSCI 1100 or COML 1000 or COML 1100 or ITEC 1100 or BTEC 1010 or satisfactory completion of the College computer literacy "Test out" option; keyboarding skills recommended.

CSCI 1500: Introduction to Programming and Problem-Solving

3.00 credits (3.00 lec)

This is an introductory computer course for those interested in programming but who have no programming experience. The course emphasis is on the use of problem-solving techniques to develop computer program solutions to simple programming problems. Topics include number systems; information representation in memory; programming languages and development environments; problem-solving, program design, and pseudocode; loops and decisions, functions, arrays, structures, and recursion. You will write programs using one or more programming languages (such as C++ or Java).

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 1110 or completion of MATH 0080.

CSCI 1700: Introduction to Computer Programming in Java

3.00 credits (3.00 lec)

This course is intended for students who are interested in learning about a modern object-oriented programming language. The course will introduce object-oriented programming concepts using Java. Topics covered will include: introduction to Java applets and applications, software development in Java, control structures, methods, arrays, object-oriented programming, strings and characters, graphics, and GUI components.

Prerequisites: MATH 1110 or MATH 1125; introductory programming experience; placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CSCI 1730: Introduction to Object-Oriented Programming With C++

4.00 credits (4.00 lec)

This course presents an introduction to object-oriented programming using C++. Topics covered will include loops, decisions, structures, functions, objects and classes, arrays, operator overloading, inheritance, pointers, polymorphism, streams, and files. In addition, the course teaches the problem-solving skills required to design programming solutions in C++.

Prerequisites: MATH 1110 or MATH 1125; introductory programming experience; placement into READ 1300 or completion of READ 0200 or ESOL 0052.

CSCI 1901: Structure of Computer Programming 1

4.00 credits (4.00 lec)

This is an entry-level course for students planning to pursue a four-year degree in computer science. The course emphasizes problem-solving techniques for writing computer programs. The programming language Scheme will be used to solve problems, but this is not a language course. Topics covered will include: expressions, procedures, recursion and iteration, procedures as arguments and as returned values, procedures using lambda, introduction to data abstraction, hierarchical data, symbolic data, multiple representations for abstract data, assignment and local state, the environment model of evaluation, modeling with mutable list structure and queues, and streams.

Prerequisites: MATH 1110 or MATH 1125 and introductory programming experience.

CSCI 1902: Structure of Computer Programming 2

4.00 credits (4.00 lec)

This is a follow-up course to CSCI 1901 and is intended for students planning to pursue a four-year degree in computer science. The course uses an object-oriented language, such as C++ or Java, to cover additional data structures and algorithms. You will implement data structures and their operations as abstract data types using an object-oriented approach. Topics to be covered in this course include: data abstraction through classes, introduction to data structures, stacks, queues, linked lists, sorting, and searching.

Prerequisites: CSCI 1700 or CSCI 1730 or CSCI 1901.

CSCI 2011: Discrete Mathematics

4.00 credits (4.00 lec)

This course is intended to give students studying computer science the mathematical foundation they will need for their future studies. However, it may be taken by students in a wide variety of majors, including mathematics and engineering. Topics covered will include logic, sets, functions, sequences, complexity of algorithms, number theory, matrices, methods of proof, mathematical induction, recursive algorithms, counting methods, discrete probability, relations, graphs, and tree fundamentals.

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 or MATH 1125.

CSCI 2998: Directed Study

Prerequisites: One course in CSCI; placement into READ 1300 or completion of READ 0200 or ESOL 0052 and department approval.

Construction Electricity

CNEL 1000: Introductory Electric Circuits

2.00 credits (1.00 lec/1.00 lab)

This course will instruct you in understanding basic D.C. electrical circuit theory, reading electrical circuit diagrams, applying Ohm's Law, and using electrical measuring devices.
Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 1010: Semiconductor Circuits

2.00 credits (1.00 lec/1.00 lab)

This course covers basic theory, operation, and practical applications of various diodes and transistors.
Prerequisites: CNEL 1000; HVAC 1050; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 1025: Introduction to Electric Motors

2.00 credits (1.00 lec/1.00 lab)

This course will instruct you in basic theory, operation, application, maintenance, identification, and repair of electrical motors used in commercial and residential applications. Hermetic compressors will be covered at length, as well as starting components and troubleshooting techniques.
Corequisites: CNEL 1000.

CNEL 1050: A.C. Circuit Analysis

3.00 credits (2.00 lec/1.00 lab)

This course will acquaint you with the concepts of alternating current. This will include sine wave characteristics, vector analysis, capacitive circuits and inductive circuits.
Prerequisites: CNEL 1000; HVAC 1050; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisite: CNEL 1100, CNEL 1050.

CNEL 1100: Single-Phase Transformer Principles

1.00 credit (1.00 lab)

This course will acquaint you with elementary transformer principles in single-phase circuits.
Prerequisites: CNEL 1000; HVAC 1050; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisite: CNEL 1050, CNEL 1150.

CNEL 1150: Introductory Motor Controls

2.00 credits (1.00 lec/1.00 lab)

This course covers interpretation of elementary diagrams and various control components.
Prerequisites: CNEL 1000, HVAC 1050; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisites: CNEL 1050, HVAC 1250 and HVAC 1300.

CNEL 2000: Residential Wiring

4.00 credits (2.00 lec/2.00 lab)

This course covers basic wiring techniques and how to draw and use wiring diagrams that are used in residential applications.
Prerequisites: CNEL 1010, CNEL 1050, CNEL 1100, CNEL 1150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisite: CNEL 2250.

CNEL 2050: Blueprint Reading

2.00 credits (2.00 lec)

This course covers the construction and design of residential and commercial buildings, plans, symbols, and specifications specific to the electrical industry.
Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2150: Three-Phase Systems and Transformers

2.00 credits (1.00 lec/1.00 lab)

This course covers three-phase theory. You will also learn single-phase and three-phase transformer connections for power distribution.
Prerequisites: CNEL 1010, CNEL 1050, CNEL 1100, CNEL 1150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisite: CNEL 2250.

CNEL 2200: Electrical Raceway Installation

2.00 credits (1.00 lec/1.00 lab)

This course covers cutting, bending, treading and installation of various types of electrical raceway.
Prerequisites: CNEL 1050, CNEL 1100, CNEL 1150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.
Corequisite: CNEL 2250.

CNEL 2250: National Electrical Code 1

2.00 credits (2.00 lec)

This course covers the regulations for installing various types of wiring materials such as nonmetallic sheathed cable, armored cable, electrical metallic tubing, and rigid metal conduit. You will also become familiar with requirements for general electrical installations, branch circuit requirements, and grounded conductor parameters.

Prerequisites: CNEL 1010, CNEL 1050, CNEL 1100, CNEL 1150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2300: Electrical Rotating Machinery

2.00 credits (1.00 lec/1.00 lab)

This course covers the construction, operation, installation, and maintenance of D.C. and A.C. generators and motors.

Prerequisites: placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

Prerequisite/Corequisite: CNEL 2150.

CNEL 2400: Feeder and Service Installation

2.00 credits (1.00 lec/1.00 lab)

This course covers the techniques and fittings to install large feeders and electric services. You will also learn the requirements of the *National Electrical Code Book* (N.E.C.) for the installation of feeders and services.

Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2450: Advanced Motor Controls

3.00 credits (2.00 lec/1.00 lab)

This course covers the use of more complex timing circuits, counting circuits, photo control circuits and circuits with other high-tech pilot devices. You will also study Article 430 of the *National Electrical Code Book* (N.E.C.) to learn the various sections of motor circuits and perform calculations pertaining to motor circuits.

Prerequisites: CNEL 1010, CNEL 1050, CNEL 1100, CNEL 1150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2500: N.E.C. Calculations

2.00 credits (2.00 lec)

This course covers the various calculations required throughout the *National Electrical Code Book* (N.E.C.).

Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2550: National Electrical Code 2

2.00 credits (2.00 lec)

This course introduces complex electrical equipment and its installation requirements. You will cover grounding, hazardous locations, lighting fixtures, appliance circuits, air conditioning circuits, electric heating, special occupancies and special equipment.

Prerequisites: CNEL 1000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2600: Commercial Wiring

3.00 credits (1.00 lec/2.00 lab)

This course covers the complete installation of various types of raceways and wiring methods found in commercial and industrial occupancies.

Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

Corequisite: CNEL 2650.

CNEL 2650: Programmable Controls

2.00 credits (1.00 lec/1.00 lab)

This course covers the theory, operation, installation, hardware, software and practical application of the programmable logic controller.

Prerequisites: CNEL 2150, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2700: Trade and Industry Relations

1.00 credit (1.00 lec)

This course profiles the framework for obtaining and maintaining healthy relationships within the work and social structure of the electrical industry.

Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2750: Digital Electronic Circuits

1.00 credit (1.00 lab)

This course introduces integrated circuit technology. It covers integrated circuits for logic control, operational amplifiers, counting and timing circuits, and display decoders.

Prerequisites: CNEL 2000, CNEL 2150, CNEL 2200, CNEL 2250, CNEL 2300, CNEL 2450; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2800: Electrical Circuit Design

1.00 credit (1.00 lec)

This course covers the various factors that affect the efficiency of an electrical distribution system.

Prerequisites: CNEL 2150; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

CNEL 2998: Directed Study

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070; placement into ESOL 0041 or completion of ESOL 0031.

Culinary Arts

CULA 1005: Culinary Fundamentals

5.00 credits (2.00 lec/3.00 lab)

This course introduces basic food preparation skills and industry sanitation practices. You will learn about cooking theories and the principles used in the food service industry. The hands-on laboratory will introduce you to knife skills and basic cookery methods. You will prepare stocks, soups, sauces, proteins, breakfast items and cold foods.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESO L0042 with faculty recommendation into ESOL 0052.

Prerequisite/Corequisite: CULA 1109.

CULA 1105: Foodservice Purchasing and Receiving

2.00 credits (2.00 lec)

This course provides a basic understanding of the purchasing function in the food service sectors. You will learn about the ways in which value can be added by members of the food service distribution channel. You will also discuss the necessary elements or purchase specifications and how to select and evaluate distributor partners. You will develop and understanding of ethics, group purchasing, electronic purchasing methods, and food safety issues.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052 and placement into MATH 0070 or completion of MATH 0060.

CULA 1106: Introduction to Baking

3.00 credits (1.00 lec/2.00 lab)

This course covers baking terminology; the function of ingredients; proper mixing and baking methods; and texture and taste of the finished products, such as yeast breads, quick breads, pies, cakes, meringues, custards, puddings and cookies.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Prerequisite/Corequisite: CULA 1109.

CULA 1109: ServSafe Sanitation

2.00 credits (2.00 lec)

This course develops the understanding of the principles of sanitation and safety necessary to maintain a safe and healthy environment for both the consumer and the employee in the food service industry. You will learn about the laws and regulations related to food safety and sanitation in food service operations. Upon successful completion of this course, you will be ServSafe certified.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CULA 1110: Food Service Nutrition

3.00 credits (3.00 lec)

This course introduces sound nutritional practice, menu planning and the identification of nutritional trends and considerations. You will gain skills and knowledge that you can apply in menu writing and analysis and food preparation.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CULA 1115: Hospitality Supervisory Management

3.00 credits (3.00 lec)

This course covers the organization and management of a workforce. You will learn about the recruitment, selection, orientation, training and development of employees. You will also learn about performance appraisals, compensation, and discipline methods, and you will develop leadership skills to become a successful manager within the culturally diverse hospitality industry.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052 and placement into MATH 0070 or completion of MATH 0060.

CULA 1120: Casual Restaurant Operations

5.00 credits (1.00 lec/4.00 lab)

This course develops production skills at assigned workstations within a student operated restaurant. The types of menu items prepared are those served in casual service (sports bar/family) restaurants emphasizing current dining trends. You will prepare menu items, such as appetizers, salads, sandwiches, soups, entrees, vegetables, breakfast and bakery selections. You will perform daily mise en place and clean-up procedures and use a variety of service styles to serve prepared meals to the dining public.

Prerequisites: CULA 1005, CULA 1109.

CULA 1125: International Cuisine

3.00 credits (1.00 lec/2.00 lab)

This course focuses on foods served in restaurants around the world. You will develop an understanding of the evolution of regional flavors. Discussions will include history and effects of bordering countries, geography, climate, indigenous foods, culture, and religious influences on menu offerings. You will prepare and serve food in a fully functional restaurant.

Prerequisites: CULA 1105 and CULA 1109.

CULA 2000: Artisan Baking

3.00 credits (3.00 lab)

This course provides work experience in the fundamentals of professional baking. You will produce and finish a variety of yeast doughs, specialty breads, cookies, pastries, pies and cakes. You will study the materials used in baking and how they relate to one another in the mixing, processing and baking of specific products.

CULA 2100: Event Planning Methods

3.00 credits (3.00 lec)

This course provides the skills and methods needed for planning a buffet, banquet or catered event. You will complete a portfolio that includes all the documents needed for a catered event. Your plan will consist of a culinary experience that involves the production, supervision, nutrition, sanitation and food costing skills learned in other CULA courses.

Prerequisites: CULA 1005, CULA 1109.

CULA 2103: Advanced Pastry and Baking

3.00 credits (1.00 lec/2.00 lab)

This course covers baking terminology, the function of ingredients, proper mixing and baking methods, decoration, and the construction of finished baked products served in a fine dining establishment.

Prerequisites: Placement into READ 0200 or ESO L0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Prerequisites/Corequisites: CULA 1106, CULA 1109.

CULA 2500: Beverage Management

3.00 credits (3.00 lec)

This course is the study of beer, wine and distilled spirits, as well as the facilities in which they are served. You will develop an understanding and appreciation for various beverage and food affinities. You will study the social impacts, trends, and responsibilities associated with the consumption of alcohol. You will complete the National Restaurant Association Education Foundation ServSafe Alcohol Advanced Examination.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CULA 2502: Garde Manager

3.00 credits (1.00 lec/2.00 lab)

Garde Manager is the French term for the Pantry, also known as the "Cold Kitchen." In this course, you will develop skills in the preparation of cold foods that are frequently served on buffets. Decorative work and food presentation are key course components. Discussions and production will include cold hors d'oeuvres, protein fabrication, sausage making, salt curing and smoking foods. You will be applying principles of platter design and buffet set-up as well.

Prerequisites: CULA 1005, CULA 1109.

CULA 2505: Menu Planning

2.00 credits (2.00 lec)

This course examines the basic concepts and principles of menu planning, including pricing, merchandising, document layout, and design. You will develop menus for various styles of operations, and you will learn to apply efficiencies to production in relation to profitability.

Prerequisites: Placement into RAD 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; placement into MATH 0070 or MATH 0077 or completion of MATH 0060.

CULA 2510: Full Service Restaurant Operations

5.00 credits (1.00 lec/4.00 lab)

This course develops production skills at assigned workstations within a student-operated restaurant. You will prepare menu items prepared typical of a full-service (formal/classic) restaurant, emphasizing current dining trends: appetizers, salads, sandwiches, soups, entrees, vegetables, and bakery selections. You will perform daily mise en place and clean-up procedures, and you will use a variety of service styles to serve prepared meals to the dining public.

Prerequisites: CULA 1005 and CULA 1109; placement into READ 0200 or ESOL 0052 or completion of RED 0100 or ESOL 0042 and faculty recommendation into ESOL 0052.

CULA 2998: Directed Study

Prerequisites: One course in CULA; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Dental Assistant

DNTA 1000: Introduction to the Dental Field

2.00 credits (2.00 lec)

This course provides an introduction to professional opportunities within the dental field. You will focus on dental history, terminology, the roles and responsibilities of each dental health team member, and the Minnesota Dental Practice Act. The course will build upon competencies achieved in the Healthcare Core Curriculum.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070 and HCCC 1100.

DNTA 1015: Customer Service Skills for the Dental Office

3.00 credits (3.00 lec)

This introductory course provides skills to work in a supportive role in a dental office. You will focus on reception skills, clerical applications, business office equipment, and the commonly used scheduling methods used in the dental office setting. This will include computerized software and standard types of processes used in current dental practices to effectively schedule and communicate with patients. You will build upon competencies achieved in the Healthcare Core Curriculum and apply them specifically to the dental office.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070 and HCCC 1100.

Corequisite: DNTA 1000.

DNTA 1025: Clinical Support for the Dental Office

2.00 credits (2.00 lec)

This course provides the skills needed to safely support other clinical personnel. You will focus on charting techniques, disease transmission, infection control and health/safety issues in dentistry. You will participate in a lab setting to simulate patient interactions and master the skills required to be an effective member of the dental health team. The course will build upon competencies achieved in the Healthcare Core Curriculum.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070 and HCCC 1100.

Corequisite: DNTA 1000.

DNTA 1035: Dental Office Support Skills Lab

2.00 credits (2.00 lab)

This course provides the opportunity to use and practice skills learned in DNTA 1000, DNTA 1015 and DNTA 1025. You will identify and observe various employment opportunities available in dental office and participate in laboratory sessions on-campus and at dental clinics in the community. You must pass DNTA 1000, DNTA 1015, and DNTA 1025 prior to attending the community-based learning. Must be taken pass/fail.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070 and HCCC 1100.

Corequisites: DNTA 1000, DNTA 1015 and DNTA 1025.

DNTA 1101: Introduction to Dental Assisting

3.00 credits (3.00 lec)

This course introduces you to the dental profession and to dental assisting, as well as provides knowledge of legal terms, ethical standards, and legal issues as they relate to dentistry. The course will focus on program requirements, dental terminology, dental history, roles and responsibilities of each member of the dental team, dental office procedures and communications, levels of supervision, dental ethics and legal issues, and the Minnesota Dental Practice Act.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1110: Dental Science

3.00 credits (3.00 lec)

This course is a basic introduction to anatomy, physiology, embryology, and pathology, with an emphasis on the head, neck, and oral cavity. The course will focus on the human body systems, specific tissues, structures, and landmarks of the head, neck and oral cavity, to include the primary and permanent dentition.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1115: Dental Anatomy

1.00 credits (1.00 lec)

This course is a basic introduction to the anatomy, physiology, embryology, histology and pathology of the oral cavity. You will focus on the tissues and structures of the oral cavity, and on the primary and permanent dentition.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1120: Preclinical Dental Assisting

1.00 credits (1.00 lec)

This course will provide basic scientific concepts related to the causes of disease, its spread and methods for control. You will focus on disease transmission: protection of the patient and dental personnel through the use of Universal Precautions Centers for Disease Control (CDC) Standards and Occupational Safety and Health Administration (OSHA) Standards.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1130: Chairside Dental Assisting 1

3.00 credits (2.00 lec/1.00 lab)

This course will provide knowledge in patient management, chairside assisting and the concepts of four-handed dentistry. You will focus on medical/dental histories, vital signs, medical and dental emergencies, drug classifications, and commonly used drugs in dentistry. You will have the opportunity to demonstrate the appropriate armamentarium for dental procedures, seating positions, instrument transfer and operator setup for full utilization of a chairside assistant.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Corequisites: DNTA 1101 and DNTA 1120 or approval from the program director.

DNTA 1140: Chairside Dental Assisting 2

2.00 credits (2.00 lec)

This course provides you with the knowledge of restorative dentistry and the dental specialties that assist and provide supportive functions specific to each area. This course will focus on terminology, armamentarium, procedures and the clinical aspect of each dental specialty.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1170: Clinical Externship 1

3.00 credits (3.00 int)

This course provides you with the opportunity to develop skills learned in the classroom through practical application. The course will focus on assisting in a dental office and participating as a member of the dental health team. Must be taken pass/fail.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1201: Introduction to Expanded Functions

2.00 credits (1.50 lec/0.50 lab)

This course will introduce you to expanded functions legal in Minnesota for a registered dental assistant to perform. The course will focus on program requirements, and review of anatomy and physiology, dental specialties, dental materials, pharmacology, and microbiology/infection control. This course will also identify the levels of supervision, dental ethics and legal issues as they relate to the Minnesota Dental Practice Act.

Prerequisites: Acceptance into the Expanded Functions Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1210: Dental Materials

3.00 credits (1.00 lec/2.00 lab)

This course provides the background knowledge, functions and manipulative skills in dental materials. The course will focus on commonly used dental materials, their purpose, properties, manipulation, placement, care, hazards and storage.

Prerequisites: Acceptance into the Dental Assistant program; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1250: Radiology 1

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to oral radiology, as well as the preclinical application of radiographic techniques. This course will focus on key landmarks, principles of radiation, radiation health and safety, radiographic techniques using both the parallel and bisecting angle techniques, mounting radiographs, and radiograph evaluation. You will begin their practice on skulls.

Prerequisites: DNTA 1101, DNTA 1110, DNTA 1120 and DNTA 1130. Required of students enrolled in the diploma program only.

Corequisites: DNTA 1201 or approval from the program director, is required of students enrolled in the certificate program only.

DNTA 1260: Dental Assistant Expanded Functions 1

4.00 credits (1.00 lec/3.00 lab)

This course is part of the advanced functions legal in Minnesota for a Registered Dental Assistant to perform. The course will focus on delineation of duties, knowledge, and opportunity to perform orthodontic, periodontal, oral, and maxillofacial surgery expanded duties, as well as on the preclinical and clinical skills in rubber dam, excess cement and bond removal, and taking an alginate impression to include a bite registration.

Prerequisites: DNTA 1101, DNTA 1110, DNTA 1120, DNTA 1130, DNTA 1210 and CPR or acceptance into the Expanded Functions Dental Assistant program or approval from the program director.

DNTA 1274: Clinical Externship 2

4.00 credits (4.00 int)

This course is a continuation of Clinical Externship 1 and will provide you with the opportunity to continue developing skills initiated in the classroom and previous dental office experience, through practical application. The course will focus on assisting in a dental office and participating as a member of the dental health team. Must be taken pass/fail.

Corequisites: DNTA 1210; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

DNTA 1350: Radiology 2

3.00 credits (1.00 int/2.00 lab)

This course is a continuation of Radiology 1 and provides you with an opportunity to develop skills in exposing, processing, and evaluating radiographs. This course will focus on the preclinical and clinical application of radiographic techniques. You will practice exposing radiographs on patients.

Prerequisite: DNTA 1250.

DNTA 1360: Dental Assistant Expanded Functions 2

4.00 credits (1.00 lec/1.00 int/2.00 lab)

This course continues with the advanced functions legal in Minnesota for a Registered Dental Assistant to perform. The course will focus on nutrition as it relates to oral health; oral hygiene instruction; mechanical polishing of the clinical crowns; application of fluoride; preclinical and clinical skills in the induction of nitrous oxide-oxygen inhalation analgesia and the application of pit-and-fissure sealants.

Prerequisites: DNTA 1260 or approval from the program director.

DNTA 2998: Directed Study

Prerequisites: One course in DNTA or approval from the program director; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

ECON 2000: Principles of Macroeconomics

3.00 credits (3.00 lec)

In this course, economic problems are examined by focusing on national income, employment, inflation, the banking system, monetary and fiscal policy, international trade and growth.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

ECON 2200: Principles of Microeconomics

3.00 credits (3.00 lec)

The economic problem is examined by focusing on demand, supply, prices, elasticity, the firm and its costs, market structure, and government.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

ECON 2500: Contemporary Economic Problems

3.00 credits (3.00 lec)

This course examines contemporary economic problems within alternative basic economic frameworks and within their international context. Problems introduced include unemployment, inflation, environment, poverty, debts, agriculture, military spending, plant closings and the economic future. Several of the problems are examined in depth.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

ECON 2998: Directed Study

Prerequisite: One course in ECON.

Education

Economics

ECON 1000: Consumer Economics

3.00 credits (3.00 lec)

This course examines the role of the consumer in the U.S. economy and the basic process of decision-making in relation to spending on major consumer items. The course will also examine the role of industry, government and protective agencies in relation to the consumer. Topics covered will include: budgeting, credit, food, clothing, housing, transportation, taxes, advertising, fraud, protective agencies and current problems.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

EDUC 1000: Careers in Education, Child and Youth Development

1.00 credits (1.00 lec)

This course introduces you to career opportunities for working with children and youth in a variety of settings. The course also examines education and training requirements, licensing regulations, and characteristics of quality programs and settings. You will complete career exploration activities in a variety of settings.

EDUC 1150: Mentoring the Urban Student

2.00 credits (2.00 lec)

This course offers you an opportunity to enrich a young person's life through mentoring. Through collaboration with Big Brothers Big Sisters, you will be matched with a 6- to 13-year-old attending the Interdistrict Downtown School (IDDS). You will meet with the child at IDDS for an hour each week at a prearranged time based on his or her schedule. In addition, weekly course lectures and discussion occur online. You will examine the role of a mentor, the mentoring process, the urban context, developmental assets, bridging differences, boundaries and limit-setting, and issues that offer come up in mentoring urban children and youth. No experience with children is necessary. You will need to complete a thorough application process through Big Brothers Big Sisters prior to the first week of class.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

EDUC 1170: Tutoring the Urban Student

3.00 credits (1.00 lec/2.00 lab)

This course examines best practices for tutoring urban youth in elementary, middle and secondary school settings. You will participate in intensive tutor training and tutor K–12 children. In order to complete this course, you must be able to work as a tutor five hours per week throughout the semester. All students enrolled in this course will need to complete an application process, requiring a background check, prior to the first week of class in order to work in the public school system.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070 or MATH 0077.

EDUC 1215: Child, Youth Growth and Development

3.00 credits (3.00 lec)

This course presents an overview of typical and atypical child and youth development across cultures from birth through age 18. You will examine all developmental domains, including the physical, social, emotional, cognitive, language, gender, and cultural development, as well as identify strategies to enhance and support the development of children and youth.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

EDUC 1235: Guidance Strategies for Children and Youth

3.00 credits (3.00 lec)

This course provides an overview of the physical and social environments that promote learning and development for children and youth. You will examine your own beliefs about appropriate guidance, and you will explore basic guidance strategies for individual and group situations. Emphasis is on preventive measures and positive guidance strategies, including recognition, communication, limit-setting, problem-solving, consequences, community building, peer mediation, and behavior modification. You will observe guidance strategies being used in childcare programs, classrooms and recreational settings.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

EDUC 1500: Introduction to Urban Education and Learners.

3.00 credits (2.00 lec/1 lab)

This course prepares you for work in Urban schools, recreational settings, and birth-school age educational settings—both formal and informal—by examining the broader urban context. You will examine your own socializations, position yourself as a future urban educator/youth professional and begin to explore urban learners' worlds through community-based action research. You will also be introduced to foundations of education, legal aspects, cultural competency theories and practices, qualities of urban learners, communities and environment, and civic engagement. Upon completion, you will be able to make more informed decisions about your pathway into child development, education, or recreation as fields of study and potential careers.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

EDUC 1900: Public Work in Urban Schools and Community Sites

3.00 credits (2.00 lec/1 lab)

Using Public Achievement as a teacher development initiative, you will act on your self-interest and participate on teams to create public work that is nonviolent and contributes to the common good. Working with faculty coaches, you learn the 12 core concepts of Public Achievement and apply them to urban education settings. You will develop collaborative and democratic working skills (Teacher-as-Citizen and Teacher-as-Leader models), both in academic and small-group settings. You will read about democratic pedagogical and community-organizing theories and practices.

Prerequisite: EDUC 1500 or coordinator's approval.

EDUC 2200: Introduction to Language and Language Teaching for ESOL Educators

3.00 credits (3.00 lec)

This course is designed for paraprofessionals and tutors working with ESOL populations and introduces basic concepts of language, language acquisition, and language teaching. You will learn and be able to explain how knowledge of these concepts improves your ability to tutor and teach English. You will also apply these concepts to real-life instructional situations. (This course is not for teaching licensure.) This course can be taken concurrently with EDUC 2300.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

EDUC 2250: Introduction to Special Education

3.00 credits (3.00 lec)

This course explores special education: the history of the field, definitions, classifications, theoretical approaches, service delivery models, trends and issues. You will examine the physical, social, cognitive, and behavioral challenges which affect children and youth with disabilities. You will also become familiar with the legal aspects and key legislation regarding special education, as well as familial and communal contexts, for students with special needs.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisites/Corequisites: EDUC 1215 and EDUC 1235.

EDUC 2260: Instruction for Exceptional Learners

3.00 Credits (3.00 lec)

This course emphasizes approaches to working with exceptional learners, including informal assessment, documentation practices and classroom management skills. You will learn prevention and intervention strategies for working with children and youth with special needs in both educational and alternative settings. You will also examine techniques to analyze and manage challenging and disruptive behaviors. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/corequisite: EDUC 2250.

EDUC 2270: Learning Disabilities and Behavior Disorders

3.00 credits (3.00 lec)

This course prepares students interested in working with children and youth who have learning disabilities and behavior disorders. You will learn the identifiable characteristics of and examine the trends and issues related to these children and youth. You will analyze the effects of dysfunctional behavior on learning and identify major social, academic, and behavioral characteristics of students with a learning disability and/or a behavior disorder.

Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: EDUC 2250.

EDUC 2280: Communication and Collaboration in Diverse Educational Settings

2.00 credits (2.00 lec)

This course prepares students interested in working with children and youth who have special needs. You will acquire and build skills to interact and work effectively with students, teachers, administrators, parents, and alternative service providers in school and other settings. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: EDUC 2250.

EDUC 2300: Introduction to English for ESOL Educators

3.00 credits (3.00 lec)

This course is designed for unlicensed educators (such as paraprofessionals and tutors) working with ESOL populations and reviews the grammatical structure and sound system of English as required for work with English language learners. You will identify the grammatical structures and aspects of pronunciation in English that cause problems for English language learners. You will also develop strategies and techniques for teaching and tutoring problematic English grammatical structures and aspects of pronunciation. This course can be taken concurrently with EDUC 1200 or EDUC 1400.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

EDUC 2400: Methods and Materials for ESOL Educators

4.00 credits (4.00 lec)

This course is designed for unlicensed educators (such as paraprofessionals and tutors) and introduces methods and materials for teaching and tutoring ESOL reading, writing, listening, speaking/pronunciation, and grammar. You will develop, implement, and revise ESOL lesson plans with special emphasis on working with small groups and individualized tutoring. You will also learn how to use embedded technology. By the end of the course, you will have an e-portfolio project that captures and demonstrates the best methods/materials developed during your studies.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

EDUC 2600: Public Achievement Coaching—Field Experience

3.00 credits (2.00 lec/1 lab)

Using Public Achievement as a teacher development initiative, you will coach young people in public work teams, leading (or co-leading) a team of urban students through the students' Public Achievement experiences. Working with coach coordinators, you will regularly participate in pre-coaching meetings as well as self- and group-reflective de-briefing meetings. Coaching sites vary from semester to semester, but they are always off-campus.

Prerequisites: EDUC 1900; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

EDUC 2900: Teacher's Experience in Urban Schools

3.00 credits (2.00 lec/1 lab)

This course continues the professional development of urban teaching candidates both by having you critically reflect on your academic and life experiences and by having you refine your electronic portfolios for public viewing. Course work expands and deepens your understanding of urban school settings, learners and politics.

Prerequisites: EDUC 2600; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Corequisite: ENGL 1111.

EDUC 2998: Directed Study

Prerequisites: One course in EDUC and instructor's approval.

Electroneurodiagnostic Technology

ENDT 1010 Foundations of Electroneurodiagnostic Technology

6.00 credits (3.00 lec/3.00 lab)

This course has both a lab and a lecture component; the theory portion is an introduction to Electroencephalography, EEG. You will learn about your role as a member of the healthcare team, the scope of practice for electroneurodiagnostic technologists and ethical considerations in health care. You will also learn about these topics: patient assessment and history taking, the 10/20 system of electrode placement and application, recording techniques, and parameters and pattern recognition. For the lab portion of this course, in a simulated EEG laboratory, you will practice the skills listed above. Emphasis will be on patient interactions, confidentiality and safety practices.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070 or MATH 0077; Completion of ESOL 0043 or "exempt in listening and speaking" on placement exam.

Prerequisites/Corequisites: BIOL 1127, BIOL 1128, HCCC 1100, COML 1100 or successful completion of computer literacy requirement

Corequisite: ENDT 1030.

ENDT 1030: Introduction to Electroneurodiagnostic Technology

3.00 credits (3.00 lec)

This course covers the history and evolution of electroneurodiagnostic technology; ENDT including: the scope of practice, credentialing, job descriptions, patient interactions, safety and ethical considerations, patient confidentiality and documentation, and multicultural considerations. You will learn about your role as an ENDT and member of a healthcare team.

Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0070 or MATH 0077; completion of ESOL 0043 or "exempt in listening and speaking" on placement exam.

Prerequisites/Corequisites: BIOL 1127, BIOL 1128, HCCC 1100, COML 1100 or successful completion of computer literacy requirement.

Corequisite: ENDT 1010.

ENDT 1100: Clinical Neurology for ENDT

4.00 credits (4.00 lec)

This course provides a basic understanding of nervous system anatomy and physiology. You will learn about the neurological exam, diagnostic tools and neurological disorders. The course will highlight major clinical neurological conditions and EEG correlates across the lifespan.

Prerequisites: "C" or higher in the following: ENDT 1010, ENDT 1030, HCCC 1100, BIOL 1127, BIOL 1128, COML 1100 or successful completion of computer literacy requirement.

Corequisites: ENDT 1510, ENDT 1525.

Prerequisite/Corequisite: ENGL 1110.

ENDT 1510: Technical Concepts and Equipment

6.00 credits (3.00 lec/3.00 lab)

This course has both a theory and a practical component. In the theory portion, you will learn about the principles of ENDT instrumentation according to technical recording guidelines and standards. In the lab portion, you will complete a hook up and a recording of an EEG according to technical guidelines and standards. You will ensure patient safety, apply electrodes and other monitors, collect data, perform procedures, recognize characteristics of EEG waveforms and artifacts, and write up a technical description of the EEG. Must be taken A-F.

Prerequisites: "C" or higher in the following: ENDT 1010, ENDT 1030, COML 1100, HCCC 1100, BIOL 1127, BIOL 1128.

Corequisites: ENDT 1525, ENDT 1100.

Prerequisite/Corequisite: ENGL 1110.

ENDT 1525: Clinical Correlates 1

2.00 credits (2.00 lab)

This course provides hands-on interaction with doctors, residents, fellows and preceptors in various settings, emphasizing clinical correlations. You will participate in conferences, case reviews, record reading and review, and continuing education held at the clinical affiliate sites. You will also follow EEG recording guidelines and standards of practice. Must be taken A-F.

Prerequisites: "C" or higher in the following: ENDT 1010, ENDT 1030, HCCC 1100, BIOL 1127, BIOL 1128, and COML 1100 or successful completion of computer literacy requirement.

Corequisites: ENDT 1510, ENDT 1100.

Prerequisite/Corequisite: ENGL 1110.

ENDT 1850: Clinical Internship 1

4.00 credits (4.00 int)

In this introductory internship you will prepare patients for EEG monitoring in the clinical setting. You will care for patients, ensuring their safety, as well as preparing, initiating and completing routine EEG testing on patients across the lifespan. Must be taken pass/fail.

Prerequisites: "C" or higher in the following: ENDT 1510, ENDT 1525, ENDT 1100, ENGL 1110. Clear background check.

Prerequisite/Corequisite: PSYC 1110.

ENDT 2010: Evoked Potentials for the ENDT

3.00 credits (2.00 lec/1.00 lab)

This course provides a basic understanding of evoked potentials (EPs) and how they are used in neurodiagnostic medicine. You will learn evoked potential instrumentation, recording methods, troubleshooting and waveforms with clinical correlations. You will ensure patient safety. Must be taken A-F.

Prerequisites: "C" or higher in PSYC 1110, ENDT 1850.

Prerequisite/Corequisite: SPCH 1012.

Corequisites: ENDT 2030, ENDT 2050.

ENDT 2030: Nerve Conduction Studies

3.00 credits (2.00 lec/1.00 lab)

Beginning fall 2011

This course provides a basic understanding of Electromyograms (EMGs) and Nerve Conduction Studies (NCSS) and how they are used in neurodiagnostic medicine. You will study instrumentation, recording methods and waveforms with clinical correlations emphasizing patient safety. In the lab, you will learn the basics of nerve and muscle stimulation and recording with surface electrodes.

Prerequisites: "C" or higher in PSYC 1110, ENDT 1850.

Prerequisite/Corequisite: SPCH 1012.

Corequisites: ENDT 2050, ENDT 2010.

ENDT 2050: Clinical Internship 2

8.00 credits (8.00 Int)

Beginning fall 2011

In this clinical course you will apply previously learned theoretical EEG concepts and skills on patients across the lifespan. You will become more independent in data attainment and pattern recognition in the clinical setting. You will provide EEG testing to patients with a range of neurological conditions, from simple to complex. You may also have the opportunity to observe advanced procedures in Nerve Conduction Studies, EMG and Evoked Potentials in the clinical setting and operating room. Must be taken pass/fail.

Prerequisites: "C" or higher in PSYC 1110: Successful completion of ENDT 1850. Clear background check.

Corequisites: ENDT 2010, ENDT 2030.

Prerequisites/Corequisites: SPCH 1012

ENDT 2400: Intraoperative Monitoring

5.00 credits (3.00 lec/2.00 lab)

This course covers the technologist's role in the Operating Room, including methods of recording, factors affecting waveform resolution, actions of different pharmacologics, surgical outcomes, and trouble shooting. You will practice patient safety, including infection control; electrical safety; hazard; and patient rights and confidentiality. To enroll in this course, you must either meet the pre-requisites or obtain instructor approval by having successfully graduated from a CAAHEP-accredited ENDT program or holding the following credentials: R. EEGT. and/or R.EPT.

Prerequisites: ENDT 2010, ENDT 2030; or Instructor Approval.

ENDT 2525: Clinical Correlates 2

2.00 credits (2.00 lab)

Beginning fall 2011

This course provides advanced interaction with physicians in a variety of settings emphasizing clinical correlations. You will participate in conferences, case reviews, record reading and review, and continuing education held at the clinical affiliate sites. You will follow ENDT recording guidelines and standards of practice with integration of additional complex EEG, EP and NCS/EMG concepts. Must be taken A-F.

Prerequisites: C or higher in the following: ENDT 2010, ENDT 2030, SPCH 1012, ENDT 2050.

Prerequisite/Corequisite: PSYC 2240.

Corequisites: ENDT 2550.

ENDT 2550: Clinical Internship 3

8.00 credits (8.00 int)

Beginning fall 2011

This course provides experiences in a variety of patient care settings. You will perform basic EEG procedures under limited supervision. Under direct supervision of clinical preceptors, you will perform complex EEG procedures, evoked potentials and nerve conduction studies. You will apply theoretical content to meet clinical objectives. Must be take pass/fail.

Prerequisites: "C" or higher in the following: ENDT 2010, ENDT 2030, SPCH 1012; ENDT 2050. Clear background check.

Corequisites: ENDT 2525. *Prerequisite/Corequisite:* PSYCH 2240.

English

ENGL 0900: Fundamentals of Written English

5.00 credits (5.00 lec)

This course will prepare you for college-level writing. You will write several essays and a reflective letter. Your essays will include your perspective on an issue and your analysis of other writers' ideas. You will focus on learning the writing process so that you can generate ideas and organize them into essays; you will also review grammar and mechanics. A committee will evaluate two of your essays and your letters to decide whether you pass the class. Must be taken pass/no credit.

Prerequisite: Placement into ENGL 0900 or completion of ESOL 0041.

ENGL 1108: Technical Writing

3.00 credits (3.00 lec)

This course focuses on analyzing and practicing workplace communications such as reports, proposals, instructions, letters, memos and email. A balance between learning the process and creating the product will help you understand the expectations and issues surrounding common and complex workplace writing.

Prerequisites: ENGL 0900 completion or equivalent placement.

ENGL 1110: College English 1

3.00 credits (3.00 lec)

This course gives you instruction and practice in writing essays for a variety of purposes and audiences. You will receive instruction and help in developing ideas, thinking critically, organizing your writing, and revising and editing sentences. By approaching writing as a process involving prewriting, drafting, peer response, revising, and editing, you will be able to write more clearly, fully, and gracefully.

Fulfills MnTC Goal Area 1.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

ENGL 1111: College English 2

3.00 credits (3.00 lec)

This course teaches you how to write a research paper. Some sections have particular topics, such as "Race, Gender and Identity," and other sections allow you to choose your own topic, subject to the instructor's approval. All sections teach valuable research methods. You will find, analyze, and synthesize information from inside and outside of the library, and write well-reasoned, detailed research papers with properly cited sources.

Fulfills MnTC Goal Area 1.

Prerequisite: ENGL 1110.

ENGL 1150: Literature and the Environment

3.00 credits (3.00 lec)

This course covers a wide range of writing about human experience and the environment such as essays, stories, journals, poems, music lyrics and plays. You will read literature of the Americas written over several centuries that will focus on our changing and diverse human experience within the environment, as well as on our attitudes toward the physical world.

Fulfills MnTC Goal Areas 6 and 10.

Prerequisite: ENGL 1110.

ENGL 1151: Introduction to Literature: Short Story

3.00 credits (3.00 lec)

This course covers a variety of short stories from authors from around the world and explores the texts through critical analysis. You will learn about the basic elements common to all short stories. You will also consider the cultural and national contexts of specific stories and identify significant details, patterns, and cultural values and assumptions. In developing critical responses, you will achieve a greater understanding of literature and yourself.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 1152: Introduction to Literature: Novel

3.00 credits (3.00 lec)

This course covers the basic elements of the novel. You will apply critical skills in discussing and writing about novels from various ethnic groups and communities from within the United States, possibly including Native American, European-American, Hispanic-American, Asian-American and African-American. You will identify patterns, values and assumptions within the novels. By developing critical responses, you will increase your understanding of the novel as an art form, of the societies in which the novels arose and of yourself.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 1153: Introduction to Literature: Poetry

3.00 credits (3.00 lec)

This course offers an analysis of various forms of poetry and their structures. You will use critical-thinking procedures to work your way through the elements of poetry, as well as the contexts in which poetry is written. As a result of this course, you will appreciate and enjoy poetry more, while also developing your analytical skills. You will examine a cross-section of poetic styles and eras and will read and think critically about poetry from a variety of culturally and ethnically diverse American writers.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 1154: Introduction to Literature: Drama

3.00 credits (3.00 lec)

This course gives you the chance to read and go to plays. You will learn the fundamentals of drama, such as comedy, tragedy, plot setting, character, staging and irony; go to local theaters to see how a play is actually staged; and discuss and write about plays to analyze what you have read and seen on stage.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ENGL 1156: Science Fiction and Fantasy

3.00 credits (3.00 lec)

This course reviews selected readings and films from the evolving genres of science fiction and fantasy. You will learn how to analyze these texts from a variety of viewpoints: aesthetic, historical, feminist, psychoanalytical and ethical. You will examine the works as reflections of real contemporary issues in environmental, technological, cultural, economic and political spheres. Through discussions, writings and projects, you will connect the concerns raised in the works to your own society and its values.

Fulfills MnTC Goal Areas 6 and 9.

Prerequisite: ENGL 1110.

ENGL 1157: Cross-Cultural Literature

3.00 credits (3.00 lec)

This course surveys the cultural expressions, values and lifestyles of North America's many peoples, including minority and majority cultures. You will read and think critically about American literature written by a variety of culturally diverse authors, including Native Americans, African-Americans, and other immigrant and cultural groups.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 1158: Women's Literature

3.00 credits (3.00 lec)

This course explores a range of literature written in English by women. The course will focus on multiple literary genres: poetry, drama, long and short fiction, journals, essays, autobiography and memoir. You will read the literature of women across the globe, as well as the diverse body of literature by American women, exploring themes of power, culture, class, ethnicity, and sexuality and will be introduced to feminist literary theory.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 1160: Lesbian, Gay, Bisexual, Transgender, Queer Literature

3.00 credits (3.00 lec)

This course offers a definition and a survey of lesbian/gay/bisexual/transgender/queer (LGBTQ) literature from ancient times to the present. You will read a wide range of literary and historical texts, with an emphasis on 20th-century poetry, fiction, creative nonfiction and drama, and you will engage in the questions that invigorate this evolving field. This course has a strong cross-cultural emphasis.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 1161: Children's Literature

3.00 credits (3.00 lec)

This course introduces you to the wide range of children's literature. You will study the genres and history of children's literature, the critical responses to it, and the reasons for valuing this unique art form. The course addresses the interests of college students, educators and parents.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 1162: Introduction to the Literature of African Diaspora: African, African American, Afro-Caribbean, and Afro-Latin Stories of Dispersion

3.00 credits (3.00 lec)

This course will introduce you to creative writing by both African and African descended writers, exploring how diasporic Africans created viable lives for themselves in a “New World,” which includes the Americas, the Caribbean, and Western Europe. You will examine the common experiences shared by African Diaspora writers: cultural traditions, histories of domination and resistance, slavery and emancipation, colonialism and imperialism, anti-colonial and anti-racist movements.

Fulfills MnTC Goal Area 6 and 8.

Prerequisite: ENGL 1110.

ENGL 2212: Introduction to Creative Nonfiction Writing

3.00 credits (3.00 lec)

This course is an introduction to the varied genre of creative nonfiction: memoir, personal essay, cultural commentary, nature writing, political satire, etc. You will practice creative self-expression and develop voice, style, and audience awareness. You will also learn the craft of effective writing by observing how published writers use various themes, styles and methods of story development.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ENGL 2213: Introduction to Creative Writing

3.00 credits (3.00 lec)

This course covers practice in writing both poetry and fiction, with emphasis on development of individual style and form, as well as an analysis of professional works and devices. In addition to working on creative self-expression, you will develop the abilities, craft and discipline needed to produce quality writing that allows you to reach an audience: training your voice, developing a personal style, experimenting with structure, enhancing your descriptive skills, improving your command of language, and establishing techniques for revising. You will study various types of poetry and fiction, and give and receive feedback online from peers and your instructor.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ENGL 2214: Introduction to Writing Poetry

3.00 credits (3.00 lec)

This course covers aspects of writing effective poetry. In addition to working on creative self-expression, you will develop the abilities, craft and discipline needed to produce quality poetry that allows you to reach an audience: training your poetic voice, developing a personal style, experimenting with structure, enhancing your descriptive skills, improving your command of language, and establishing techniques for revising. You will study various types of poetry: lyric, narrative, free and formal verse, surreal and collage forms. You will give and receive feedback in student workshops.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ENGL 2215: Introduction to Writing Fiction

3.00 credits (3.00 lec)

This course covers various aspects of writing effective fiction. In addition to working on creative self-expression, you will develop the abilities, craft and discipline needed to produce quality fiction that allows you to reach an audience: training your voice, developing a personal style, experimenting with structure, enhancing your descriptive skills, improving your command of language, and establishing techniques for revising. You will study various types of contemporary fiction: realism, surrealism, magical realism, experimental writing, children’s stories and fairy tales. You will give and receive feedback in student workshops.

Fulfills MnTC Goal Area 6.

Prerequisite: ENGL 1110.

ENGL 2225: World Literature—Asia and the Middle East

3.00 credits (3.00 lec)

This course introduces you to the literature of Asia and the Middle East from ancient to modern times. You will read, discuss, and write about short stories, novels, poems, and religious and philosophical literature from the Middle East, South Asia, Southeast Asia, and East Asia. You will gain insight into the commonalities of human experience, as well as the diversity of human life and expression in Asia and the Middle East. You will come to understand how ethnic and cultural differences influence human expression.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 2226: World Literature—Europe, Africa, Latin America

3.00 credits (3.00 lec)

This course introduces you to the literature of Europe, Africa and Latin America from ancient to modern times. You will read, discuss, and write about short stories, novels, poems, and religious and philosophical literature from Europe, Africa, and Latin America. You will gain insight into the commonalities of human experience, as well as the diversity of human life and expression, in those regions. You will come to understand how ethnic and cultural differences influence human expression.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 2231: American Literature 1

3.00 credits (3.00 lec)

This course examines the literature of the Americas, concentrating on literature produced in the territory that became the United States from European conquest through the mid-19th century. Among the literature you read will be Native American works; writings of the European conquerors and colonists; African-American works; and early-to-middle-19th-century fiction, poetry, and prose.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 2232: American Literature 2

3.00 credits (3.00 lec)

This course examines literature of the United States from after the Civil War through the present. You will read and consider fiction, poetry, and prose that reflect the diverse social, cultural, and literary experiences of the inhabitants of the United States.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisite: ENGL 1110.

ENGL 2251: British Literature 1

3.00 credits (3.00 lec)

This course covers selected English literature from the Anglo-Saxon period through the age of Johnson. In studying this period, you will be a witness to major foreign invasions of England and to the evolution of English language and literature, which are both products of interactions between the native populations and the outside world. You will study literary works in their historical, social, and world contexts; engage these works from your own perspective; and gain insight into British culture and how it is the result of ethnic and cultural influences within the British Isles, the European continent, and beyond.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 2252: British Literature 2

3.00 credits (3.00 lec)

This course covers selected English literature from the Romantic period through the present. You will come to understand these works in terms of historical, social and world contexts. You will also gain insight into British culture and how it is the result of ethnic and cultural influences within the British Isles, on the European continent, throughout the former British empire, and in the world beyond.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: ENGL 1110.

ENGL 2261: African American Literature 1

3.00 credits (3.00 lec)

This course explores the emergence and formal development of the historical African American literary tradition. You will read texts beginning in the 17th century through the latter half of the 20th century, including work by slaves, ex-slaves, those surviving Reconstruction, those surviving the era of Jim Crow, those from the Harlem Renaissance, and those flourishing in the Black Arts Movement. You will examine diverse genres, which may include but are not limited to the following: slave narratives, novels, plays, poems, speeches, song lyrics and music.

Fulfills MnTC Goal Area 6 and 7.

Prerequisite: ENGL 1110.

ENGL 2262: African American Literature 2

3.00 credits (3.00 lec)

This course explores the emergence and formal development of the contemporary African American literary tradition. Popular writers such as Terry McMillan and Walter Mosely will be featured, as well as younger writers who are just beginning their careers. You will explore themes including relationships, race/racism, family life, neighborhoods, work life, through genres as diverse as short stories, poems, novels, song lyrics, speeches, hip hop, rap, and blues.

Fulfills MnTC Goal Area 6 and 7.

Prerequisite: ENGL 1110.

ENGL 2998: Directed Study

Prerequisite: One course in ENGL.

English as a Second Language

ESOL 0031: Writing and Grammar 3

5.00 credits (5.00 lec)

This course focuses on practicing and developing basic writing skills by applying them to a variety of situations. You will improve your grammar, writing fluency, self-editing ability and ability to write short essays. You will also learn to follow a writing process that will include using computers to edit and revise your essays. Must be taken pass/no credit.

Prerequisite: Placement into ESOL 0031.

ESOL 0032: Reading 3

5.00 credits (5.00 lec)

This course introduces the skills and strategies necessary for understanding a variety of written materials. You will learn to identify main and supporting details in nonfiction, increase your reading rate and comprehension, and analyze features of fiction. In addition, you will build vocabulary using a variety of strategies. Must be taken pass/no credit.

Prerequisite: Placement into ESOL 0032.

ESOL 0033: Listening and Speaking 3

5.00 credits (5.00 lec)

This course provides the knowledge and practice necessary to further improve your listening, speaking and pronunciation skills in English in order to help you be more successful in future academic courses. You will work on these skills through activities such as listening to lectures and tapes and watching videos; taking notes in English; doing dictations; participating in discussions; doing interviews; giving presentations; and doing exercises in the language lab. Must be taken pass/no credit.

Prerequisite: Placement into ESOL 0033.

ESOL 0041: Writing and Grammar 4

4.00 credits (4.00 lec)

This course develops higher level writing skills in a variety of situations. You will improve your grammar, writing fluency, self-editing ability, and learn to write essays of varying lengths and genres. You will also practice and improve your writing skills through extensive writing and word processing. Must be taken pass/no credit.

Prerequisites: Placement into ESOL 0041 and ESOL 0033 or completion of ESOL 0031.

ESOL 0042: Reading 4

4.00 credits (4.00 lec)

This course develops your ability to understand a variety of written materials. You will learn to identify main ideas and supporting details in nonfiction, increase your reading rate and comprehension, and analyze features of fiction. In addition, you will increase your vocabulary using a variety of strategies. Must be taken pass/no credit.

Prerequisites: Placement into ESOL 0042 and ESOL 0033 or completion of ESOL 0032.

ESOL 0043: Listening and Speaking 4

4.00 credits (4.00 lec)

This course provides the knowledge and practice necessary to further improve your listening, speaking and pronunciation skills in English in order to help you be more successful in future academic courses. You will work on these skills through activities such as listening to lectures and tapes and watching videos; taking notes in English; doing dictations; participating in discussions; doing interviews; giving presentations and doing exercises in the language lab. Must be taken pass/no credit.

Prerequisites: Placement into ESOL 0043 or completion of ESOL 0033.

ESOL 0051: Writing and Grammar 5

4.00 credits (4.00 lec)

This course focuses on providing advanced writing students whose native language is not English with the ability to understand and use aspects of grammar, style and organization that cause unique problems for non-native English speakers. You will learn a variety of writing skills necessary to succeed in entry-level college writing courses. Must be taken pass/no credit.

Prerequisites: Placement into ESOL 0051 or completion of ESOL 0041 and teacher recommendation into ESOL 0051; completion of ESOL 0043 or "exempt in listening and speaking" on placement exam.

ESOL 0052: Reading 5

4.00 credits (4.00 lec)

This course develops your ability to comprehend and discuss topics related to a variety of academic reading materials. You will learn to identify main and supporting details in nonfiction, increase your reading rate and comprehension, analyze features of fiction, and apply critical thinking skills. In addition, you will build your academic vocabulary using a variety of reading strategies. Must be taken pass/no credit.

Prerequisites: Placement into ESOL 0052 or completion of ESOL 0042 and teacher recommendation into ESOL 0052; completion of ESOL 0043 or "exempt in listening and speaking" on placement exam.

ESOL 2998: Directed Study

Prerequisite: One course in ESOL.

French

FREN 1000: Beginning French 1

5.00 credits (5.00 lec)

This course is the first in a sequence of courses providing an introduction to the language of France and other French-speaking countries. You will explore many aspects of the language through listening, reading, writing and speaking, which will help you understand and appreciate your own language from another point of view.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 1100: Beginning French 2

5.00 credits (5.00 lec)

This course is the second in a sequence of courses providing an introduction to the language of France and other French-speaking countries. You will explore many aspects of the language through listening, reading, writing and speaking, which will help you understand and appreciate your own language from another point of view.

Fulfills MnTC Goal Area 8.

Prerequisites: FREN 1000 or equivalent; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 1200: Introduction to French

2.00 credits (2.00 lec)

This is an introductory French course designed for students who have had no previous instruction in French or for beginners who would like to brush up on their French. You will practice useful and practical vocabulary of the spoken French language. You will become more sensitive to cultural differences and find it useful for business and travel. Taught in summer only.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 1300: French Culture

2.00 credits (2.00 lec)

This English language course examines the history and culture of French-speaking societies, focusing on several major francophone areas of the world: France, North America, sub-Saharan Africa, The Caribbean and North Africa (the Magreb). You will study the following topics: geography and the environment, history, literature and the arts, social patterns and conventions, and social institutions. No knowledge of French is necessary.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 2000: Intermediate French Language and Culture 1

5.00 credits (5.00 lec)

This is an intermediate-level class that follows the Beginning French sequence. You will further develop skills with grammar and idiomatic expressions to facilitate greater fluency in speaking, writing, reading and listening. You will read a variety of literary excerpts to develop skills of literary analysis in French. Cultural readings will stimulate conversation and composition to develop skills of cultural analysis and criticism as well. You will develop the ability to present ideas and opinions, as well as to support them.

Fulfills MnTC Goal Area 8.

Prerequisites: FREN 1100 or equivalent ability; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 2100: Intermediate French Language and Culture 2

5.00 credits (5.00 lec)

This class follows the Intermediate 1 course. You will further develop skills with grammar and idiomatic expressions to facilitate greater fluency in speaking, writing, reading and listening. You will read a variety of literary excerpts to develop skills of literary analysis in French. Cultural readings will stimulate conversation and composition to develop skills of cultural analysis and criticism as well. You will develop the ability to present ideas and opinions, as well as to support them. In order to succeed in this course, you should have, as a minimum, ability corresponding to the ACTFL intermediate-low rating. For more information, contact the French Department.

Fulfills MnTC Goal Area 8.

Prerequisites: FREN 2000 or equivalent ability; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

FREN 2998: Directed Study

Prerequisites: One course in FREN; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Geography

GEOG 1101: Human Geography

3.00 credits (3.00 lec)

This course offers an introduction to geographic facts, theories and methods as they relate to humans and their occupation of the Earth. It uses a general systems perspective and a thematic approach to understanding where, why and how humans live. Various themes covered are the human-Earth relationship, population, migration, cultural systems, language, religion, social customs, social systems, development, politics, urbanization, agriculture, industrialization and natural resource use.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOG 1102: The Physical Environment

3.00 credits (3.00 lec)

This course offers an introduction to geographic facts, theories and methods as they relate to the Earth's physical environment. This course uses a general-systems perspective and a thematic approach to understanding the natural environment and how it is impacted by human occupation. Various themes covered include the solar system, atmosphere, climate, ozone depletion, greenhouse effect, hydrosphere, waste disposal, fresh water, lithosphere, soil, natural disasters, biosphere and biodiversity.

Fulfills MnTC Goal Areas 5 and 10.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOG 1103: The Global Economy

3.00 credits (3.00 lec)

This course is an introduction to geographic facts, theories and methods as they relate to economic systems used throughout the world, and the rising pattern of global economic interdependence. This course uses a general-systems and thematic approach to understanding how people and groups cooperate in providing what they need and want. Various themes covered include economic theory and practice, development, production, labor force, land use, natural resources, trade, international organizations and global economic problems.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOG 1104: Minnesota

3.00 credits (3.00 lec)

This course is an introduction to Minnesota, its regions and cities. It examines the people, social and cultural institutions, and physical makeup of our home state and cities. It will trace the spatial and historical evolution of our area and examine today's Minnesota. It will also explore environmental issues and decisions faced by Minnesotans. The course includes self-guided walking tours of Minneapolis and optional self-guided driving tours of other parts of the metro area and the state.

Fulfills MnTC Goal Areas 5 and 10.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOG 2204: Peoples of the World

3.00 credits (3.00 lec)

This course is an introductory survey of people and their social and cultural institutions throughout the world. After an overview of basic geographic concepts, each of the world's major regions are studied in depth. Finally, the course examines some global issues and global citizenship.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOG 2998: Directed Study

Prerequisites: One course in GEOG; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Geology

GEOL 1120: Physical Geology

3.00 credits (3.00 lec)

This course explores the principles and processes of geology with an emphasis on the study of the Earth's structures, materials (internal and external) and plate tectonics. Topics covered in the course include igneous, sedimentary and metamorphic rocks. Special attention is paid to the dramatic role of volcanoes, earthquakes, erosion and landslides in the shaping of our planet. Field trips are an optional part of the course.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOL 1130: Physical Geology Lab

1.00 credit (1.00 lab)

This course introduces the general principles and techniques of mineral and rock identification. Other topics covered include topographic map and stratigraphic analysis, as well as structural geology.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: GEOL 1120.

GEOL 1140: Historical Geology

3.00 credits (3.00 lec)

This course serves as an introduction to the general principles and processes of geology with an emphasis on the study of geologic time (absolute and relative), and the correlation of geologic time with the rock record, past life forms and geographies. Topics covered include the formation of our planet within the context of the solar system, as well as the evolution of our Earth's surface and the life forms which inhabit it. Special emphasis is placed upon the cycles our planet experiences, which seemingly control its destiny. Field trips are an optional part of the course.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GEOL 1150: Historical Geology Lab

1.00 credit (1.00 lab)

This course introduces the general principles and techniques of sedimentary rock, mineral and fossil identification. Other topics covered include sedimentary environments, tectonic settings and age relations.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Prerequisite/Corequisite: GEOL 1140.

GEOL 2998: Directed Study

Prerequisites: One course in GEOL; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Global Health and Healing Arts

GHHA 1100: Introduction to Energy Medicine

3.00 credits (3.00 lec)

This course covers the physics of energy and its application to the internal body and relationships to the external world. You will learn the principles of energy, which is both the life force itself and responsible for healing. From traditional and cross-cultural views of energy, you will discover the anatomy of the human energy body and the energy systems, such as the meridian and chakra systems, that work alongside and with the physical body. You will explore the scientific basis for and the basic principles of healing techniques in energy medicines such as Reiki, therapeutic touch, presence, and shamanism. Must be taken A-F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

GHHA 1200: Exploration of Shamanic Apprenticeship

3.00 credits (3.00 lec)

This course introduces the ways in which, in traditional shamanic communities, work is sacred, with a deep understanding and respect for the sense of being "called" to one's chosen field or role. You will learn about the traditional and modern call to apprenticeship. You will also explore the selection and education of shamans and community elders. Discussions and exercises will help you discern your unique calling and provide you with tools and resources for future learning.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

GHHA 1300: Healing Traditions in our Diverse Community

3.00 credits (3.00 lec)

This course explores the healing traditions of shamans, healers, and medicine people found in many cultures around the globe, including those embraced by the largest ethnic/minority groups in the Twin Cities' metropolitan area. You will have an opportunity to hear several guest speakers who are traditional healers in their communities. You will also gain the tools and skills to research the historical healing skills from your own ethnic background.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

GHHA 1400: Introduction to Traditional Chinese Medicine

3.00 credits (3.00 lec)

This course examines the origins and evolution of Traditional Chinese Medicine (TCM), its scope of practice, and its variety of healing modalities. You will learn TCM's diagnostic theories and methods, adjunctive therapies, and how TCM differs from Western medicine. This course examines the latest research concerning TCM's efficacy and its most current applications. You will learn why TCM is in the forefront of complementary forms of medicine.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GHHA 1500: Introduction to Meditation and Mindfulness

2.00 credits (2.00 lec)

You will develop an understanding of the cultural and historical background of meditation in major world religions. You will examine current research on meditation, mindfulness, and health. You will develop your ability to enter a calm and centered state of awareness through working with the body, the breath, and the mind.

Prereq: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

GHHA 1600: Introduction to Chinese Patent Medicine

3.00 credits (3.00 lec)

This class will introduce you to the world of Chinese patent medicine (classic herbal formulas based on Traditional Chinese Medicine (TCM)). You will learn the history behind the development of prepared Chinese herbal medicines, their use globally and their availability in the United States. You will learn about basic TCM diagnostic principles and methods and how to apply them to the selection of patent medicine. You will gain the knowledge to select the appropriate patent medicine to sustain health as well as those used to help heal a variety of common complaints and illnesses.

Prerequisites: placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

GHHA 1700: Introduction to Chinese Dietary Therapy

3.00 credits (3.00 lec)

In this course, you will learn the ways Traditional Chinese Medicine (TCM) makes use of the therapeutic value of food. You will learn how the TCM perspective on food is finding its way onto the global table and the ways TCM principles can be used to inform choices about food for maintaining health as well as for treating illness. You will learn how to apply basic TCM diagnostic principles to the selection of food. You will gain the knowledge to select the most appropriate food to sustain a healthy diet and help heal common illnesses.

Prerequisites: placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Graphic Design: Print Media

GRPH 1101: Typography 1

3.00 credits (2.00 lec/1.00 lab)

This course covers the history, structure and principles of typography, as well as special considerations of designing with type. You will work with the traditional elements of typography: form, spacing, layout, color, mixing fonts and the integration of type with images.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisite/Corequisite: GRPH 1130.

GRPH 1120: Layout and Design 1

3.00 credits (2.00 lec/1.00 lab)

This course introduces the elements of design, creative thinking techniques, and the fundamentals of layout design including balance, movement, unity, clarity, simplicity, emphasis, and color. You will explore layout styles, reconstruct existing layouts and develop a proficiency with markers as a layout tool.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 1130: Introduction to Graphics Software

3.00 credits (2.00 lec/1.00 lab)

This course introduces the multiple elements and techniques of using the computer and basic software applications used in the graphic design industry. You will work with an individual workstation, tutorial software, and word processing and graphics software to enter text and create graphics. Emphasis is on typesetting concepts, proofreading and working within prescribed sets of design specifications.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; keyboarding (25 WPM) experience required, or COML 1100.

GRPH 1140: Color Theory

3.00 credits (2.00 lec/1.00 lab)

Using lecture, demonstration and studio work, this course introduces color theory, its application, and reproduction. You will learn about the psychophysical, cultural, and perceptual parameters of color, and you will explore the theory and history of a variety of color systems. You will develop the ability to use and manage color effectively in creative applications by studying correct scientific and artistic theories related to color, organization, perception, reproduction and interaction.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 1520: Layout and Design 2

3.00 credits (2.00 lec/1.00 lab)

This course covers advertising layout techniques using fractional, full-page and spread layouts. It also covers nonadvertising print areas from single to multiple page layouts. It includes assignments and critiques of projects rendered as comps and mock-ups.

Prerequisite: GRPH 1101, GRPH 1120 and GRPH 1130 and placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 1540: History of Graphic Design

3.00 credits (3.00 lec)

This course explores graphic design through the ages, identifying important design elements, movements, innovators and applications, as well as the impact of graphic design on life and culture from signage to publishing to packaging.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 1560: Print Production 1

3.00 credits (2.00 lec/1.00 lab)

This course covers the basic materials, methods, and mechanical processes necessary to the production of print-ready publications and other print media. You will learn the language of print production, be introduced to the studio skills/equipment, work with a computer/laser printer/scanner, and produce one/two-color projects. You will learn the fundamentals of paper specifying, print buying, proofing, and meeting and managing production deadlines.

Prerequisites: GRPH 1101, GRPH 1130, GRPH 1140; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisite/Corequisite: GRPH 1585.

GRPH 1570: Adobe Illustrator

3.00 credits (2.00 lec/1.00 lab)

This course covers the basics of Adobe Illustrator, a vector-based drawing program used to produce logos and artwork for printed publications, multimedia, and Web graphics. Topics covered include: creating basic shapes, working with points and lines, using transformation tools, blending elements, tracing templates, creating masks, using filters, customizing colors, and creating and formatting text.

Prerequisites: GRPH 1130; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 1585: Adobe InDesign

3.00 credits (2.00 lec/1.00 lab)

This course is an introduction to Adobe InDesign page layout software, used to create professional quality single and multiple-page documents that are designed for printing, Web publication, and other electronic delivery systems. You will learn the fundamentals of style sheets, master pages, importing and manipulating text and images, typographic controls, color management, preflighting and output options as applied to practical projects for commercial printing and the web.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; and GRPH 1130 or instructor approval.

Prerequisite/Corequisite: GRPH 1101.

GRPH 2101: Typography 2

3.00 credits (2.00 lec/1.00 lab)

This course provides specific experiences that focus on the technical and aesthetic issues of typographic form in communication design. Emphasis is on the inventive use of type and typography throughout the whole creative process, from concept to application. You will merge traditional typographical aesthetics with current electronic technologies, developing typographical solutions for print, digital, and corporate identity assignments.

Prerequisites: GRPH 1101, GRPH 1120, GRPH 1585; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 2110: Adobe Photoshop

3.00 credits (2.00 lec/1.00 lab)

This course provides a practical understanding of the knowledge and skills required of digital content creators to use Photoshop in today's digital design studio. Computer lab assignments and lectures will provide diversified experiences. Various interdisciplinary aspects will be explored.

Prerequisites: GRPH 1130; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060 or instructor approval; or for MPRO majors only, MPRO 1111.

GRPH 2125: Digital File Preparation and Management

3.00 credits (3.00 lec)

This course focuses on the Adobe Acrobat work environment and the advanced document features of Adobe InDesign. You will produce high quality documents as Portable Document Formats (PDFs) for print and the Web. You will also create interactive forms and media. You will explore topics including creating books from multiple files; building tables of contents, indexes and cross-references; exploring document delivery options; using XML; modifying security to PDF documents; and adding navigation to and obtaining data from PDFs.

Prerequisites: GRPH 1101, GRPH 1120 (or WEBI 1416), GRPH 1130, GRPH 1140, and GRPH 1585; Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 2130: Graphic Design Problems 1

3.00 credits (1.00 lec/2.00 lab)

This course involves conceiving and executing marketable print solutions for advertising and publishing needs. You will develop original concepts and navigate between software as necessary to produce portfolio-quality digital outputs.

Prerequisites: GRPH 1120, GRPH 1520, GRPH 1540, GRPH 1560, GRPH 1585, GRPH 2110; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisite/Corequisite: GRPH 2101.

GRPH 2145: Graphic Design Internship

2.00 credits (2.00 lab)

The graphic design internship is an opportunity for you to obtain supervised work experience that provides an important learning experience, as well as a useful link to the job market. You will obtain an internship site that supports your special area of interest and provides opportunities to interact with design professionals in a creative working environment. The internship requires 120 hours of residency at a design studio, advertising agency or related company approved by the internship coordinator.

Prerequisites: Completion of 30 credits of GRPH/EPUB coursework, or instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

GRPH 2233: Adobe Photoshop: Advanced

3.00 credits (2.00 lec/1.00 lab)

This course builds on the skills learned in Beginning Adobe Photoshop (GRPH 2110) and concentrates on a deeper understanding and a creative use of the software through a variety of advanced techniques. You will demonstrate insights into complex digital image manipulation and adjustments within the context of creating original images.

Prerequisites: GRPH 1130 and GRPH 2110; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060 or instructor approval.

GRPH 2530: Graphic Design Problems 2

3.00 credits (1.00 lec/2.00 lab)

In this course, you will learn the effect of rendering digitally in natural media, image editing and animation. This course is a continuation of Graphic Design Problems 1, providing more challenging projects in advertising design and publishing markets. Working within industry standards and practices, you will produce portfolio quality digital output of their solutions.

Prerequisites: GRPH 1570, GRPH 2130; placement into READ 2300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060. *Prerequisite/Corequisites:* GRPH 2540, GRPH 2550.

GRPH 2540: Career Planning and Professional Practices

3.00 credits (2.00 lec/1.00 lab)

This course prepares you for a smooth transition into the design industry, covering such topics as identifying markets, customizing interview portfolios, networking, writing professional correspondence, creating résumés and interviewing. You will learn about industry standards practices and ethical guidelines, and you will design and produce individualized professional identity systems, Web sites, and marketing materials. You will learn the necessary tools and skills to be in charge of a job search and life-long planning. You will gain job-seeking skills through personal workbooks, informational interviews, readings, discussions, presentations and lectures. This course will give you an opportunity to prepare professional materials and skills in a supportive, cooperative and enthusiastic learning environment.

Prerequisites: GRPH 1570 and GRPH 2101 or WEBI 1811 and WEBI 2023.

Corequisite: GRPH 2550.

GRPH 2550: Portfolio Prep/Exhibit

3.00 credits (2.00 lec/1.00 lab)

This course includes refining and adapting artwork for cohesiveness, as well as professional packaging of the general portfolio. You will also participate in the planning, organization and execution of a class exhibit.

Prerequisites/Corequisites: Completion of all required courses; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisites: GRPH 1570 and GRPH 2101 or WEBI 1811 and WEBI 2023.

Corequisite: GRPH 2540.

GRPH 2622: Freelance Business

2.00 credits (1.00 lec/1.00 lab)

This course introduces the professional practices required to freelance successfully in graphic design, Web design, or other creative fields. You will learn about business types and structures, legal and financial issues, promotion and marketing, billing, pricing and copyright.

GRPH 2998: Directed Study

3.00 credits (3.00 lec)

Prerequisites: GRPH 1130; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Graphic Design: Web and Interactive Media

WEBI 1416: Web Layout and Design

3.00 credits (1.00 lec/2.00 lab)

You will apply design principles and layout fundamentals to communicate solutions to various demographics. You will design with concern for Web dynamics such as format, browser, font and platform issues, as well as consider user-end monitor size and page control while adapting navigational strategies for optimal user engagement.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WEBI 1611: HTML/XHTML Authoring 1

3.00 credits (1.00 lec/2.00 lab)

You will develop a basic understanding of HTML/XHTML, Cascading Style Sheets Level 1, JavaScript and CGIs by authoring Web pages and completing a website. Current Web tools and design issues will be surveyed. Objective will be to produce clean and fast HTML/XHTML pages built and verified to World Wide Web Consortium standards. Instruction will include online readings and tutorials.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

Prerequisite/Corequisite: WEBI 1416.

WEBI 1622: HTML/XHTML Authoring 2

3.00 credits (2.00 lec/1.00 lab)

A follow-up to Authoring 1, this course will introduce you to cutting-edge issues concerning HTML and related technologies. XML, XHTML, site accessibility, and CSS2 will be covered. JavaScript is revisited. Web design for alternative devices (wireless, webtv, aural browsers) will be discussed. You will author and troubleshoot Web pages and complete at least one website.

Prerequisites: WEBI 1416, WEBI 1611, WEBI 1911; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

WEBI 1711: Web Tools — Dreamweaver

3.00 credits (2.00 lec/1.00 lab)

This course explores Web tools and applications that are associated with creating and managing professional websites. You will design quality Websites that adhere to Web standards. *Prerequisites:* GRPH 1130; WEBI 1416; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060 or instructor approval; or for MPRO majors only, MPRO 1111.

Prerequisite/Corequisite: WEBI 1611.

WEBI 1811: Web Animation—Flash/Image Ready

3.00 credits (2.00 lec/1.00 lab)

This advanced Web design course provides a working knowledge of Adobe Flash and Action Scripting. You will become familiar with the concepts of storyboarding, historical animation, design and interactive storytelling for the creation of Web-based animation and media. You will learn Action Scripting to deliver your final media projects via the Web. You will work collaboratively as well as individually, throughout the semester to execute a series of creative goals and designs to be applied to various projects for professional portfolio development and delivery.

Prerequisites: GRPH 1130; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060 or instructor approval.

Prerequisite/Corequisite: GRPH 2110.

WEBI 1911: Scripting Overview

3.00 credits (2.00 lec/1.00 lab)

This course is an overview of client-side solution technologies for enhancing the user experience on the World Wide Web. JavaScript, Java, and DHTML will be covered along with current industry trends and standards. You will be introduced to basic programming concepts and write scripts in several languages.

Prerequisites: GRPH 1130; WEBI 1416, WEBI 1611 or instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WEBI 2012: Scripting Overview 2

3.00 credits (2.00 lec/1.00 lab)

This course is an overview of server-side solution technologies for enhancing the user experience on the World Wide Web. You will plan and design relational databases for use in dynamic web applications. You will explore topics including database planning, connectivity, and Structured Query Language (SQL). You will create a Web site using popular web application frameworks. Must be taken A–F.

Prerequisites: WEBI 1416, WEBI 1611, WEBI 1911; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

WEBI 2023: Web Layout and Design 2

3.00 credits (2.00 lec/1.00 lab)

This course explores the advanced technical and aesthetic principles of creating and designing images and graphics for the Web. You will create and produce several advanced Web Design projects in preparation for your final Portfolio courses.

Prerequisites: WEBI 1416, WEBI 1711, GRPH 1130, GRPH 1101 and GRPH 2110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ATH 0070 or completion of MATH 0060 or instructor approval.

WEBI 2116: Type in Motion

3.00 credits (2.00 lec/1.00 lab)

This advanced course examines the theory and application of Type in Motion, using lecture, demonstration, and collaborative studio work. You will focus on the application of type for the Web, Cinema, Interactive Media, and other evolving presentation formats, in which type is integrated with other motion visuals. You will develop the ability to use and experiment with the design and the application of type in order to create an effective emotional impact through interaction, texture, color and storytelling.

Prerequisites: GRPH 1101, GRPH 2110; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

WEBI 2644: Internship

2.00 credits (2.00 int)

The electronic publishing internship is an opportunity for supervised work experience that provides an important learning experience, as well as a useful link to the job market. You obtain an internship site that supports your special areas of interest and provides opportunities to interact with professionals in their working environment. The internship requires 120 hours of residency in a printing or publishing department, service bureau, desktop publishing firm, or related company approved by the internship coordinator.

Prerequisites: satisfactory completion of all 30 credits of GRPH/WEBI coursework, or instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WEBI 2998: Directed Study

Prerequisites: one course in WEBI, instructor approval; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Health

HLTH 1000: Introduction to Sleep and Rest

3.00 credits (3.00 lec)

This course introduces you to content areas related to the basic human need area of sleep and rest. You will learn about the importance of sleep and rest for a healthy life, sleep cycles, the history of sleep, and common sleep disorders. The field of sleep science and its relevance to other allied health professions is introduced. This course is open to the public and is also a required course in the Polysomnographic Technology A.A.S. program.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into or completion of ENGL 1110 or ENGL 1108.

HLTH 1101: Personal and Community Health

3.00 credits (3.00 lec)

This course examines modern concepts and practices of health and holistic living as applied to the individual. It includes discussion of selected topics to stimulate your critical thinking and problem-solving skills. Personal development, self-discipline, health maintenance, integration of the mind/body concept and drug education are stressed.

HLTH 1107: Working with People with Disabilities

2.00 credits (1.00 lec/1.00 lab)

This course provides you with experience in individual and group interactions with people that have disabilities. Prior to working with individuals at the Courage Center, you will survey the historic social context of people with disabilities in America, ground-breaking legislation, movement behavior foundations, terminology, as well as begin to discover your own attitudes and behaviors around a wide range of abilities. Unique considerations for specific impairments will be developed through your interaction within the Courage Center community.

HLTH 1128: Bridging Community and Personal Health

3.00 credits (2.00 lec/1.00 lab)

This course teaches that personal health is more than a series of individual choices; it is universal. You will learn about the community context that shapes the decisions you make about your health. You will learn how to impact environments that do not support health and wellness, and you will clarify your own values, participate on a team, and engage in public work. Must be taken A-F.

HLTH 1131: Death, Dying and Grieving

2.00 credits (2.00 lec)

This course is designed to give you an understanding of the sociocultural, physical, psychological, and ethical issues surrounding death, dying, and grieving. Some of the topics include: an historical look at views and beliefs from various cultures, grieving in the adult and child, fears and attitudes, technology and dying, suicide, funerals, euthanasia, and the living will. Emphasis will be placed on discussing and developing personal insights and beliefs concerning the topic.

HLTH 1132: Managing Stress, Managing Life

2.00 credits (2.00 lec)

This course is presented from a holistic view, so all aspects of life will be discussed. It is intended to give you workable tools to manage stress in your life and critique how to manage distress in your life. You will complete awareness exercises, problem-solve, and do personal inventories and personal plans. Topics will include: perception of stress, strength intervention, coping and managing, psychophysiology, stress and illness, risk-taking, and stress and communication.

HLTH 1135: Fitness Nutrition

2.00 credits (2.00 lec)

This course covers the role nutrition, complemented by physical activity and exercise, plays in determining one's health. You will gain an understanding of the importance nutrition plays in the enhancement of fitness based on the choices people make in their everyday lives.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; and placement into ENGL 0900 or ESOL 0051 or completion of ESOL 0041; and placement into MATH 0070 or completion of MATH 0060.

HLTH 1140: Grief, Loss and Growth

2.00 credits (2.00 lec)

This course focuses on coping with the major changes that can occur in life. You will learn about a holistic approach to loss by viewing it as "change and transition." You will understand the theories and stages of grief, which are helpful in the transition to overall health. You will obtain knowledge and tools needed to maintain wellness and make healthy choices when changes occur.

Prerequisites: Placement into READ 0200 or ESOL 0052 or completion of READ 0100 or ESOL 0042 and faculty recommendation into ESOL 0052; and placement into ENGL 0900 or ESOL 0051 or completion of ESOL 0041.

HLTH 1150: First Aid and CPR

2.00 credits (2.00 lec)

In this course, you will learn to administer first aid in treating injuries and sudden illness, including training for breathing and cardiac emergencies. American Red Cross certification in Adult, Child, and Infant CPR and First Aid: Responding to Emergencies will be earned upon successful completion of the course requirements.

HLTH 1171: Human Sexuality

2.00 credits (2.00 lec)

In this course, you will learn the biological and psychosocial aspects of human sexuality across the lifespan, including human sexual anatomy and physiology. An understanding of the influences on individual sexuality and how your sexuality impacts relationships, attitudes, and communication will be presented. Other topics include contraception, challenges to sexual functioning and sexual orientation. Current statistics and information regarding transmission, diagnosis, treatment and prevention of sexually transmitted infections will be included. Community resources, prevention and advocacy of current sexual health issues will be emphasized.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

HLTH 1180–1184: Health Topics

1.00 credit (1.00 lec)

This course will examine in depth timely topics in the health field. These topics will be pertinent to everyday living and may include: tobacco, marijuana use, fetal alcohol syndrome, parenting, personal assessment of health, consumer issues in health, etc.

HLTH 2200: Environmental Issues in Health and Wellness

2.00 credits (2.00 lec)

This course is an introduction to the principles of toxicology and how environmental agents, such as pesticides and pollutants, affect human health, specifically in the areas of disease and injury. You will assess your toxicant risk and ecological footprint and use these results to research various methods on how to improve your environmental health, such as sustainable agriculture and green living. This course also explores how you can use the environment to promote health and actually heal the mind and body.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

HLTH 2210: Infectious Diseases: An Application to Everyday Life

3.00 credits (3.00 lec)

In this course, you will learn about infectious diseases and disease concepts, with emphasis on prevention and control of infectious diseases in the individual, family and community. You will study a broad spectrum of infectious disease topics, including disease causes, transmission, outbreaks, and personal and family protection; debate the influence of geography, culture, politics and economic factors on infectious diseases; and discuss common diseases such as influenza, food-borne illnesses, and sexually transmitted diseases, as well as more exotic diseases, such as pandemic influenza, newly emerging diseases, and diseases caused by bioterrorism.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

HLTH 2249: First Responder

3.00 credits (3.00 lec)

This course presents information essential for providing emergency care in the event of injury or illness. Course material is specifically designed for those with a job-related duty to act in the event of acute injury or illness. This course fulfills the requirement for those students entering the Law Enforcement program. The Minnesota First Responder certificate is earned upon successful completion of the course requirements.

HLTH 2998: Directed Study

Prerequisites: One course in HLTH and permission of instructor.

Healthcare Core Curriculum

HCCC 1000: Health Career Exploration

0.00 credit (0.00 lec)

This module provides information about the various types of healthcare workers in various healthcare settings. Included are education and licensure/certification requirements, scope of work, types of interactions with clients, residents, their family members, peer groups and team members, and the impact healthcare workers have meeting the healthcare needs of these individuals. Also included is information about selecting, entering, and advancing in a healthcare career. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1010: Behaviors for Success in Health Careers

0.50 credit (0.50 lec)

This module focuses on the requirements needed by healthcare workers to effectively work in a variety of healthcare settings. This includes types of healthcare facilities and systems, applying for employment, accountability and responsibility; standards of dress, workplace behavior, and approaches needed to assist clients and residents; expectations of teams and team members; common healthcare facility policies and requirements; and selected medical and departmental abbreviations. Also included is discussion about how healthcare workers can impact the quality of healthcare and balance their work and personal lives to maintain personal wellness. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1020: Communication in Healthcare

1.00 credit (1.00 lec)

This module emphasizes the importance of effective communication between and among healthcare workers, clients, residents and their family members. Included are verbal and nonverbal communication, listening skills, interpersonal communication, team communication, documentation and reporting, and the use of electronic communication devices in healthcare facilities. Focus is on the development of effective communication skills to support quality client care. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1030: Awareness and Sensitivity to Client Needs

0.50 credit (0.50 lec)

This module presents challenges and issues related to the awareness and sensitivity needed to understand the healthcare needs of clients, residents and their family members. Included is the impact disease has on individuals; the emotional, spiritual, and social needs of clients; as well as the type of care needed by different age groups. Also included is the process of death and dying and how that affects these individuals and their families. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1040: Respecting Client and Staff Diversity

0.50 credit (0.50 lec)

This module provides a framework for dealing with diverse residents, clients and staff. Included are belief systems, cultural practices, and respect and sensitivity to cultural and gender issues. Emphasis is placed on awareness and use of effective strategies to appropriately deal with diversity in the workplace. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1050: Healthcare Safety and Standard Precautions

0.50 credit (0.50 lec)

This module focuses on the rules and standards related to regulatory policies required of healthcare facilities as well as personal safety standards and requirements to work in healthcare settings. Included are the principles and standards of infection control, standard precautions, healthcare facility safety policies, strategies to ensure personal and client and resident safety, and procedures to respond to emergencies. Must be taken pass/fail.
Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1060: Legal Issues in Healthcare

0.50 credit (0.50 lec)

This module focuses on the legal issues related to clients, residents and healthcare workers. Such areas as healthcare laws, client rights and responsibilities, confidentiality, liability, documentation, and regulation are explored. The relationship between ethics and legal issues is discussed, as well as the impact law and regulation has on healthcare systems. Must be taken pass/fail.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1070: Healthcare Ethics

0.50 credit (0.50 lec)

This module emphasizes the use of sound ethical practices in healthcare. Included are ethical principles and standards as they relate to the care of clients and interactions with peers, colleagues, and team members. Ethical frameworks are provided for discussion on understanding the types of ethical challenges in healthcare and the difficult decisions that need to be made. Must be taken pass/fail.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1080: Nursing Assistant Skill Set

2.00 credits (2.00 lab)

This course is an introduction to basic nursing concepts and skills at the level of the nursing assistant. Skills related to personal care, activity and exercise, nutrition, elimination, vital signs and measures, special needs, safe environment, organizational skills, and problem-solving will be taught in the classroom and clinical settings. Completion of this course and the 4-credit Health Care Core Curriculum prepares the student to take the national examination to be certified as a nursing assistant. Must be taken pass/fail.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1100: Medical Terminology

1.00 credit (1.00 lec)

This course focuses on the recognition and understanding of medical terms after you learn the meaning of word parts. A systems approach based on human anatomy is used. You will also learn to interpret and implement common medical abbreviations and symbols by utilizing healthcare forms and medical records. Correct pronunciation and spelling of terminology is emphasized.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

HCCC 1200: Dosage Calculations

1.00 credit (1.00 lec)

This course focuses on the development of the skills necessary to accurately calculate medical dosages for clients in healthcare settings. You will have an opportunity to choose dimensional analysis or ratio and proportion as a means of calculating metric and household medication orders. The course will also introduce special topics of pediatric dosages, syringe markings and powdered medications. You will explore calculations through three-dimensional classroom activities, as well as traditional paper-and-pencil problem-solving. Must be taken pass/fail.

Prerequisites: placement into MATH 0060; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

Heating, Ventilation, Air Conditioning and Refrigeration

HVAC 1000: Refrigeration Fundamentals

2.00 credits (1.00 lec/1.00 lab)

You will learn the theory of refrigeration involving temperature/pressure relationship, heat transfer, sensible and latent heat, and laws of thermal dynamics. The mechanical refrigeration cycle (including compressors, metering devices, evaporators, and condensers) will be covered, along with refrigeration pressure controls and heat pump theory.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 1050: Trade Tools and Test Instruments

2.00 credits (1.00 lec/1.00 lab)

This course covers specialty hand tools and power equipment used by HVACR technicians and electricians. Use and maintenance of various test instruments to diagnose and repair commercial and residential HVACR equipment will also be covered. Instruments used to perform electrical work will be covered as well.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 1100: Metal Fabrication

3.00 credits (1.00 lec/2.00 lab)

This course will teach techniques for cutting, bending, swaging, flaring, soldering, and brazing various types and sizes of refrigeration tubing and pipe. Refrigeration fittings, correct installation procedures and basic welding procedures will also be covered.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 1150: Refrigerant Management

2.00 credits (2.00 lec)

This course is the study of all refrigerants used in today's refrigeration and air conditioning industry. Topics include safe handling, refrigeration oils, health hazards, application, UL classifications, ozone-depletion issues, and ozone-safe replacement refrigerants. This course also covers refrigerant retrofit procedures.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Corequisite: HVAC 1000.

HVAC 1250: Interpreting Schematic Drawings

2.00 credits (2.00 lec)

This course gives a systematic approach for reading, creating, and troubleshooting electrical diagrams for HVAC and R equipment, as well as other electrical equipment. Multiple voltage, single- and three-phase circuits will be covered.

Prerequisites: CNEL 1000; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Corequisites: CNEL 1050, CNEL 1100 and CNEL 1150.

HVAC 1300: HVAC and R Controls

2.00 credits (1.00 lec/1.00 lab)

This course covers advanced control circuits for commercial and residential heating, ventilation, air conditioning and refrigeration equipment. Diagnostic procedures involving advanced HVAC and R schematics, temperature controls, timing controls, modulating motors, heat pump controls, and other various HVAC and R electrical components will also be covered.

Prerequisites: CNEL 1000; HVAC 1000; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Corequisite: HVAC 1250.

HVAC 2000: Service Procedures for HVAC and R Technicians

1.00 credit (1.00 lec)

This course covers business procedures necessary to be successful in the Refrigeration, Air Conditioning and Heating occupation. Customer relations skills will be taught to prepare you to deal with a variety of situations encountered each day by HVAC and R technicians.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

HVAC 2010: HVAC and R Internship 1

1.00 credit (1.00 int)

This course is designed to give you exposure to the Refrigeration, Air Conditioning and Heating Service trade. You will ride with HVAC and R technicians from a variety of service companies for a week to gain real-life experience in this industry.

Prerequisites: Students must have completed 26 credits in the program; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070 or MATH 0077.

HVAC 2050: HVAC and R Internship 2

1.00 credit (1.00 int)

This course is designed to give you exposure to the Refrigeration, Air Conditioning and Heating Service trade. You will ride with HVAC and R technicians from a variety of service companies for a week to gain real-life experience in this industry.

Prerequisite: Students must have completed 39 credits in the program.

HVAC 2100: HVAC Design

2.00 credits (2.00 lec)

This course covers air conditioning theory involving psychometrics (load calculations for residential heating and cooling) using the Manual "J" method of load calculation and load calculation computer software programs.

Ventilation and duct-sizing calculations, as well as the use of various air conditioning tools and test instruments, will also be taught.

Prerequisite: HVAC 1000.

HVAC 2150: Central Air Conditioners

2.00 credits (1.00 lec/1.00 lab)

You will learn procedures for the installation, maintenance, troubleshooting and repair of residential split-type air conditioning systems. The course will also cover charging procedures for high-efficiency equipment.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2200: Commercial Air Conditioners

3.00 credits (1.00 lec/2.00 lab)

This course includes: troubleshooting, repair, and maintenance of commercial air conditioning equipment, including large console units, computer room systems, cooling towers and large air handlers. Basic concepts of reciprocating and centrifugal chillers will also be covered.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2250: Heat Pumps

2.00 credits (1.00 lec/1.00 lab)

This course covers characteristics and operation of commercial and residential heat pump systems, including air-to-air, water-to-air, and ground loop systems. Instruction will be given on heat pump controls, diagnostic procedures and energy calculations.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

HVAC 2300: Commercial Refrigeration

4.00 credits (2.00 lec/2.00 lab)

This course covers troubleshooting, repair, maintenance, and installation of commercial refrigeration equipment, including walk-in coolers and freezers, soft-serve machines, commercial refrigerators, milk coolers, and supermarket equipment. You will learn about various electrical and mechanical components specific to commercial refrigeration systems.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

HVAC 2350: Commercial Ice Machines

2.00 credits (1.00 lec/1.00 lab)

This course covers troubleshooting, repair, maintenance, and installation of commercial ice-making equipment (such as Manitowoc, Scotsman, Crystal Tips, Koldraft, Whirlpool, and Hoshisaki). Instruction on both flake and cube ice machines will be provided.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2400: HVAC Rooftop Systems

2.00 credits (1.00 lec/1.00 lab)

In this course, you will learn procedures for maintenance and repair of commercial roof-top units used for heating and cooling purposes. This course will cover equipment, interpretation of electrical diagrams and economizer packages.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100, CNEL 1150; HVAC 1000, HVAC 1050, HVAC 1100, HVAC 1150, HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Corequisite: HVAC 2500.

HVAC 2450: Indoor Air Quality

2.00 credits (1.00 lec/1.00 lab)

This course covers theory, operation, and installation of commercial and residential air-filtration equipment, including media air filters and electronic air cleaners. Commercial and residential humidifiers, theory, operation and installation of residential air-exchange systems, and carbon monoxide testing will be covered.

Prerequisites: HVAC 1250; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070 or MATH 0077; placement into ENGL 0900 or ESOL 0051 or completion of ESOL 0041.

Corequisite: HVAC 2650.

HVAC 2500: Gas-Fired Furnaces

3.00 credits (1.00 lec/2.00 lab)

Troubleshooting, repair, maintenance, and installation of forced-air gas-fired heating equipment, standing pilot, spark ignition, hot-surface ignition, condensing, and pulse-combustion furnaces are covered in this course. Gas fuels, piping and venting procedures will also be explored.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100; HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2550: Oil-Fired Furnaces

1.00 credit (1.00 lab)

Troubleshooting, repair, installation and maintenance of residential forced-air, oil-fired heating equipment are covered in this course, along with combustion analysis.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100; HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2600: Residential Boilers

2.00 credits (1.00 lec/1.00 lab)

This course includes procedures for the installation, troubleshooting, repair, and maintenance of residential hot-water-heating systems. Piping techniques, gas, oil, electric heat sources, and water treatment will also be covered, along with boiler electrical controls and schematic diagrams.

Prerequisites: CNEL 1000, CNEL 1050, CNEL 1100; HVAC 1250 and HVAC 1300; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Corequisite: HVAC 2500.

HVAC 2640: Introduction to Solar Energy

2.00 credits (1.00 lec/1.00 lab)

This course covers the basics of thermal and photovoltaic solar energy used for space heating, potable hot water and electricity generating systems. You will receive hands-on training and experiment with simulated lab projects involving solar energy systems.

Prerequisites: HVAC 1050, HVAC 1250, HVAC 1300, HVAC 1100, CNEL 1000, CNEL 1025, CNEL 1050, CNEL 1100.

HVAC 2650: HVAC Sheet Metal

3.00 credits (1.00 lec/2.00 lab)

This course covers the procedure for constructing sheet metal parts for the HVAC industry. It will cover layout and proper use of common sheet metal hand tools and fabrication equipment. Basic duct design and air measurement will also be explored.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

HVAC 2700: Residential Blueprint Reading

1.00 credit (1.00 lec)

This course will cover the interpretation of residential blueprints as they apply to mechanical installation within the structure. Various blueprints from different types of structures will be presented.

HVAC 2750: Mechanical Building Code

2.00 credits (2.00 lec)

This course covers the regulations required for installing various types of mechanical equipment in a residence, including gas piping, ductwork, refrigeration piping and hydronic installations. You will become familiar with the use of the Uniform Mechanical Building Code manual. Energy code requirements that apply specifically to Minnesota will also be covered. Licensing requirements for installing HVAC equipment in Minnesota will be covered.

HVAC 2800: Furnace and Central Air Conditioner Installation

2.00 credits (2.00 lab)

This course teaches the skills necessary to properly install residential gas and oil furnaces, including high- and standard-efficiency equipment, gas piping, low-voltage wiring, and sheet metal transitions.

Prerequisite: HVAC 2650.

HVAC 2850: Advanced HVAC Sheet Metal

2.00 credits (2.00 lab)

This course teaches you to construct advanced HVAC sheet metal fittings necessary to residential HVAC equipment. Field layout and retrofit procedures will be covered. Use of air measurement instruments will be covered as well.

Prerequisites: HVAC 2650.

HVAC 2900: Radiant Floor Systems

2.00 credits (1.00 lec/1.00 lab)

This course covers the installation of residential radiant-floor-heating systems.

HVAC 2998: Directed Study

Prerequisites: One course in HVAC; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

History

HIST 1000: World History 1: Ancient and Premodern World

4.00 credits (4.00 lec)

This course is a survey of world history examining ancient, classical and medieval civilizations prior to the emergence of the West as a world power (c. 3500 BCE–1450 CE). The course explores how environmental, economic, political, social, religious, and other intellectual and cultural factors combined in different ways to influence the development of major world regions—Africa, EurAsia and the Americas. The goal is for you to understand how fundamental institutions and cultural norms of different world regions developed out of internal environments, as well as in response to developments and influences from other cultural systems and historical forces.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1010: World History 2

4.00 credits (4.00 lec)

This course is a survey of modern world history from the rise of Europe to the present era, and of how the globe was linked through cultural, racial, religious contact and clashes; migration industrialization; and imperialism. You will examine how technological, economic, social, religious, political and cross-cultural factors combined to influence the expansion of the West and, in turn, the development of Africa, Latin America, and Asia. Both global and interdisciplinary perspectives will be used to help you develop a better understanding of how different people understood, construed and developed their place in the modern world; how different regions of the world influenced each other in their response to the West; and why there were both similarities and differences in the ways people both accommodated and resisted Western domination.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1020: Contemporary World History: Issues and Themes

3.00 credits (3.00 lec)

This course explores developments and issues in contemporary world history from 1950 until the present. It provides a broad background and introduction to key people, events, and larger social, economic, technological, political, cross-cultural and global forces that have shaped our current world and created many of the problems of today. Drawing on examples from each major region of the world, you will study such topics as the beginning, impact and end of the Cold War; patterns of decolonization and national independence; diverse strategies for economic development and experiences of national building; revolution and liberation struggles; international division of labor and livelihood; cultural identity; nationalism and ethnonationalism, race and gender relations; movements for peace; and human rights and the environment.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1100: American History 1

3.00 credits (3.00 lec)

American History 1 surveys the history of America from the contributions of the indigenous Indian peoples through the Colonial Era (17th and 18th centuries) to the American Revolution and Early Republic (18th and 19th centuries). This course examines how historical American culture, institutions and events influence the present United States in the latter part of the 20th century.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1110: American History 2

3.00 credits (3.00 lec)

American History 2 surveys the history of America from the 19th to the 20th century, with emphasis on the Civil War, Social and cultural history of the 19th and 20th centuries, the Great Depression of the 1930s, race relations, and the war in Vietnam.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1200: European History 1

3.00 credits (3.00 lec)

This course provides a comprehensive survey of Greek and Roman histories and societies, the legacy of ancient societies in terms of Greece and Rome, and the impact on the development of European History. The course covers the Mycenaeans and Archaic, Classical and Hellenistic Greece. As part of this course, late pre-Christian Celtic and late pre-Christian Germanic societies will be discussed.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1210: European History 2

3.00 credits (3.00 lec)

This course covers the Early Middle Ages (500 A.D.) and the emergence of Western Europe; the High and Late Middle Ages; the Renaissance; the Reformation and the Christian Church; European Expansion; the roles of Spain, France, Holland, and England; the Scientific Revolution; and the eve of the French Revolution. As part of this course, social development and history will be explored and the European relationships with the Byzantine, Islamic, Native American and West African civilizations will be discussed.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1300: African-American History 1

3.00 credits (3.00 lec)

This course examines the African experience in the Americas from the pre-Columbian era to the Civil War. This includes African civilizations and their cultural characteristics, the formation of capitalism and its slavery roots, and the development of racialistic structures. Included will be issues of cultural hegemony, states' rights and the Civil War. The progressive attempts by African-American men and women and their Native American and Caucasian allies to obtain freedom and to gain their political rights will be explored.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1310: African-American History 2

3.00 credits (3.00 lec)

This course examines the Reconstruction and Post-Reconstruction issues experienced by African-Americans. The course focuses on African-American support for invention, the legacy of inventions, business and economic expansion, and labor issues that affect family stability in the present. In addition, the roots and development of the Civil Rights Movement will be explored in the context of the legal and social segregation in the United States.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1320: African Historical Experience and Legacy in Latin America

3.00 credits (3.00 lec)

This course examines the political, economic, social and cultural aspects of the African experience in Latin America. Included in this survey are the rise of capitalism and the legacy of music, art, performance art, political activity, and social fabric.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1500: Native American History

4.00 credits (4.00 lec)

This course is an introduction to the history of Native Americans from the pre-Columbian period to the present, with special emphasis on Native Americans in Minnesota. This approach to history is multidimensional with emphasis on oral history: personal history, through memoirs and speeches; tribal history, by focusing on the history of one reservation; and international history, by focusing on government policies and Indian experiences.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1510: Caribbean History

2.00 credits (2.00 lec)

This course is a survey of the four major eras in the Caribbean's multicultural history: Pre-Hispanic indigenous people—Ciboney, Carib, Taino/Arawak (pre-European history—15th century); African slave trade, Asian indentured servant and plantation economics (16th to the 19th centuries); and fragmented nationalism in the contemporary Caribbean (20th century).

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1520: History of Mexico

3.00 credits (3.00 lec)

This course is a broad survey that examines the political, economic, social and cultural aspects of the Mexican historical experience from its Native American roots to the present.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 1600: History of Work and American Workers

3.00 credits (3.00 lec)

This course is a survey of the labor history of work and workers and of how it has been transformed by class, race and gender over the course of American history. Beginning with indigenous American Indian cultures and ending with the global capitalist economy of the present, this course examines how economic, technological, political, social, and cultural forces, including sexism and racism, interacted to change work and U.S. society. The course also looks at how different groups of working people, women and men of diverse ethnic and racial backgrounds, struggled to organize and respond to the changes going on around them.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 2241: Women in Early America

3.00 credits (3.00 lec)

This course studies women's experience from the 1600s to the Civil War. Major themes include: women writing and publishing the debates about democracy; women's work during the Revolutionary War; resistance to colonization by indigenous women of Seminole, Creek, Cherokee and Anishinabe nations; women's founding of community service, educational and reform organizations; and women's leadership from the 1830s through the 1860s in the social movement to abolish slavery. The class will read original documents (biography, letters, newspapers, speeches and pamphlets) to interpret the laws intended to keep women in slavery and indentured servitude. You will discover how women created resistance and fought for justice.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 2242: Women in Modern America

3.00 credits (3.00 lec)

This course explores women's leadership on the civic stage from 1865 to the present. Major themes include leadership in passing civil rights amendments to the Constitution; Women's Christian Temperance Union, the moderate reformers who built communities all over America; the radical women who ran for local, state, and national political office; women's leadership for economic justice in Minnesota from the 1860s–WWI; Nonpartisan Leaguers and Farmer Laborites 1924–1944; leadership in the development of mothers' pensions and welfare; women in the Holocaust; women fighters in the Civil Rights Movement; indigenous women in struggle; and the idealists of the 1960s and 1970s. The extensive use of original documents for reading and discussion will enhance your skills in the interpretation of historical documents.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HIST 2243: Contemporary China: from 1949 to present

3.00 credits (3.00 lec)

This course introduces you to the study of contemporary China, wherein you will examine the changes that have shaped the People's Republic of China (PRC) from the Communist Revolution under the leadership of Mao Zedong through Deng Xiaoping's economic revolution to the present. You will explore the following aspects of China's history: the Communist (CCP) Revolution and establishment of the PRC; the Nationalist (KMT) exit to Taiwan and establishment of the Republic of China (ROC); the Great Proletarian Cultural Revolution; Deng Xiaoping's reforms—the “four modernizations”; the democracy movement and the events at Tiananmen Square on June 4, 1989; recent social, cultural, economic changes; and China's growing presence in this 21st-century world.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; ENGL 1110 recommended. Intro course in Social Sciences or HIST 1000 or HIST 1010 or HIST 1020.

HIST 2998: Directed Study

Prerequisite: One course in HIST.

Homeland Security Specialist

HLSC 1000: Introduction to Homeland Security

3.00 credits (3.00 lec)

This course will present the background and purpose of “homeland security,” including an historical perspective of federal and state agencies that lead up to the current state and the development of the Department of Homeland Security. You will examine the parts of the department, how they interrelate, and your purpose in responding to both natural and man-made disasters. You will assess the role of Homeland Security in protecting the country from threats both within and without its borders.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HLSC 1110: Emergency Management Systems

3.00 credits (3.00 lec)

This course will introduce you to the emergency management systems in place in both the state of Minnesota and the federal government, exploring the intricacies of an integrated system dependent on teamwork. You will critique these systems and develop creative ideas for improving emergency management systems.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HLSC 1220: Hazardous Materials Awareness

3.00 credits (3.00 lec)

In this course, you will gain an understanding of the potential hazardous materials problem at local, state and federal levels. You will examine the ways to recognize and identify the presence of hazardous materials and how to determine the material's harmful characteristics through the use of several identification strategies. You will also explore the concepts of contamination and decontamination, personal protective gear, evacuation, and responsibilities of first responders.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HLSC 1330: GIS for Homeland Security

3.00 credits (3.00 lec)

Geographic Information Systems (GIS) technology for Homeland Security is mission critical in supporting our nation's Homeland Security efforts to protect life, property and infrastructure. You will receive an overview of how GIS systems can be used to help institutions and businesses at the local, state, and federal levels collect and analyze information to provide a common operating picture for emergency and crisis management. You will work in project teams to utilize GIS data to create response plans for strategic planning or tactical operations as needed.

Prerequisite: HLSC 1000.

HLSC 1400: Emergency Management Command and Control

3.00 credits (3.00 lec)

This course will equip you with the skills required to function within the current incident management systems that exist at the county and state levels. By examining the concepts of command and control, you will analyze the Minnesota Incident Management System. You will focus on how that system interacts with the federal system and the Minnesota Emergency Operations Center.

Prerequisites: HLSC 1000 and HLSC 1110.

HLSC 2200: Terrorism and Emergency Management

3.00 credits (3.00 lec)

This course is designed to prepare students acting as first responders at the scene of a potential terrorist incident. The course will provide a general understanding and recognition of the terrorist threat, defensive considerations, as well as command and control issues associated with criminal incidents. You will be able to implement self-protective measures, secure the scene, complete appropriate notifications to authorities, and assist in a smooth transition from emergency to recovery and termination of the incident.

Prerequisite: HLSC 1110.

HLSC 2220: Hazardous Risk Assessment

3.00 credits (3.00 lec)

In this course, you will demonstrate the skills necessary to assess the risks hazardous to persons and property at a variety of sites, including business, school, industrial, and residential. These skills will include general target hardening, personal security, hazardous materials and OSHA issues.

Prerequisite: HLSC 1220.

HLSC 2330: Crisis Management, Recovery and Continuity

3.00 credits (3.00 lec)

This course will introduce the concept of managing a crisis situation with a goal of recovering and continuing vital services. These services will include government services, utilities, public works (water, sewer, roadways, etc.), police and fire protection, medical services, food distribution, and vital business and industrial output.

Prerequisite: HLSC 1400.

HLSC 2440: Weapons of Mass Destruction

3.00 credits (3.00 lec)

In this course, you will be presented with the concept of weapons of mass destruction and their different forms and threats (radiological, chemical, biological, pathogens, explosive devices, etc.). Strategies used to prevent the use of these weapons, responding to their use, mitigating loss of life and property, and planning will be analyzed.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HLSC 2500: Homeland Security Contingency Planning

3.00 credits (3.00 lec)

You will be introduced to the planning process of Homeland Security and disaster management; be able to identify the necessary elements of a sound contingency plan for different segments of a community, including government, essential services, business and industry, as well as the general citizenry; and create a model plan.

Prerequisite: HLSC 2330.

HLSC 2550: Homeland Security Practicum

3.00 credits (3.00 lec)

This course provides you with the opportunity to observe and apply the skills learned in the program courses.

Through on-site visits to emergency operations centers, 9-1-1 communications centers, emergency hospital triage areas, and other critical locations involved in emergency operations, you will record and analyze your observations and present an oral and written summary of your findings. Other strategies for observation and fact finding will include interviews with emergency operations managers, planners, and others directly involved in Homeland Security and disaster management, or participation in disaster-management exercises.

Prerequisite: Instructor approval.

Honors

HONR 2000: What Is Health? Wellness in a Multicultural World

3.00 credits (3.00 lec)

This course offers you the opportunity to explore the topic of health and wellness via three disciplines: biology, the humanities, and literature. This interdisciplinary approach will include a look at traditional Western ideas about health and compare/contrast those ideas with multicultural/alternative/nontraditional approaches to what it means to be a healthy human being. Sustainable wellness and spirituality in health will also be addressed.

Fulfills MnTC Goal Areas 3 and 8.

Prerequisites: ENGL 1111; INFS 1000; and completion of at least 12 college-level credits with a GPA of 3.5.

Human Services

HSER 1001: Introduction to Human Services and Career Assessment

4.00 credits (4.00 lec)

This course combines a basic overview of human services knowledge with self-assessment exercises to help you evaluate your choice to work in the helping professions. Topics include the human services field and profession, the history of human services, future trends, and multicultural perspective. This knowledge is combined with exercises, some small group work, and experiential learning to help you assess your personal attitudes, values, and interests in the field. Community service project outside of class may be required.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1002: Multicultural Aspects of Human Services

2.00 credits (2.00 lec)

This course focuses on the knowledge, skills and attitudes that human service students need in order to work effectively in culturally diverse communities. Included is an overview of the dynamics of privilege and discrimination as they affect human services. Using the diversity represented in the class, you will explore your own and each others' cultural identities, values, attitudes, and behaviors. You will learn how to assess the impact of cultural differences in human service situations and how to adjust communication, goals, and services to meet the needs of people with whom they work.

Prerequisites/Corequisites: HSER 1001 and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1004: Individual Counseling Skills

4.00 credits (4.00 lec)

In this course, you are introduced to a microskills model for learning beginning-level counseling skills. The model emphasizes joining, challenging, and addressing problem-management stages in addition to responding to interpersonal communication style differences. You will practice skills in small groups in class supervised by the instructor and in media-recorded role-plays, which are critiqued in class by the instructor and peer evaluator groups. By the end of the course, you will use the skills effectively to conduct basic counseling interviews. Lab time required outside of class.

Prerequisite/Corequisite: HSER 1001.

HSER 1051: Current Issues in Human Services

1.00 credit (1.00 lec)

This course systematically examines a current issue (often a problem or target population) in the field of human services that is timely and important. The course will offer a definition of the topic, historical background, current data and research on the topic, and possible solutions and action plans if a problem has been defined. This Human Services elective course is offered occasionally with varied issues as the focus. You may take this course only once, regardless of topic.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1052: Current Issues in Human Services

2.00 credits (2.00 lec)

This course systematically examines a current issue (often a problem or target population) in the field of human services that is timely and important. The course will offer a definition of the topic, historical background, current data and research on the topic, and possible solutions and action plans if a problem has been defined. This Human Services elective course is offered occasionally with varied issues as the focus. You may take this course only once, regardless of topic.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1105: Promoting Systems Change

2.00 credits (2.00 lec)

This course provides the theoretical background to systems change, as well as the practical application to implement such change at the individual and community levels. You will study theories and strategies for change from a systems perspective and apply them to a real problem in human services. Must be taken A-F.

Prerequisite/Corequisite: HSER 1001.

HSER 1110: Working with Youth

2.00 credits (2.00 lec)

This course focuses on the knowledge, skills and attitudes necessary to work effectively with youth. You will learn about basic human behavior related to youth, youth leadership, basic methods of counseling and youth advocacy with an emphasis on individual values in working with youth.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1111: Using Personality Types in Human Services

2.00 credits (2.00 lec)

This course provides theory and practice using a variety of orientations to personality style. You will use personality style theory to look at what your own style might be, your strengths and weaknesses, and possible applications of each theory in human services work. The course will encourage you to see power in recognition of diversity among personality styles.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 1115: Self-Care and Wellness for Helping Professionals

2.00 credits (2.00 lec)

This course covers theories and practical exercises related to wellness. You will learn how to enhance your own wellness and promote wellness with others. The experiential nature of the course will include textbook readings, an optional online wellness assessment, buddy support dyads, weekly journals and a wellness promotion project, all of which will involve work in and outside of the classroom. Must be taken A–F.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

HSER 2001: Introduction to Group Skills

3.00 credits (3.00 lec)

This course provides theory and supervised practice in group counseling. Topics include types and purposes of groups, group process, forming a group, group stages and stage-appropriate group leadership skills, membership issues, and professional and ethical group conduct. You will participate in a group as a member and co-leader. You will study and practice basic communication skills to improve your listening and verbal skills in a group.

Prerequisites: HSER 1004 passed with a grade of “C” or above.

Prerequisite/Corequisite: HSER 1105.

HSER 2002: Case Management Skills

4.00 credits (4.00 lec)

This course introduces and provides practice in a case management model, including intake, assessment, goal-setting, referral, clinical writing, record-keeping and evaluation. You will create a case file and learn about ethical guidelines and the use of the Diagnostic and Statistical Manual (DSM).

Prerequisites: HSER 1004 passed with a grade of “C” or above.

HSER 2003: Internship Assessment and Preparation

1.00 credit (1.00 lec)

This course focuses on preparation for an internship in Human Services. Faculty will evaluate your readiness for an internship and will guide you in selecting an internship site for the next semester. You will examine your strengths and areas for improvement as a potential human service worker, develop goals and criteria for internship site selection, and interview at a variety of possible community sites. At the end of this course, you must choose and be accepted by an appropriate internship site approved by program faculty. You must earn at least a “C” grade in this course in order to be eligible for internship the following semester. You will be required to complete a criminal background study through the Minnesota Department of Human Services.

Prerequisites: HSER 1002 and HSER 1004 passed with a grade of “C” or above.

Prerequisites/Corequisites: HSER 1105; HSER 2001; HSER 2002.

HSER 2004: Internship

6.00 credits (6.00 int)

This course is a capstone off-campus, experiential-learning component for the Human Services program. You will spend 240 hours at the human services internship site you selected during HSER 2003. You will be supervised by experienced professionals in the field and evaluated by field instructors from the HSER program. As an intern, you will apply and enhance your knowledge and skills learned in the program.

Prerequisites: HSER 2003 passed with a grade of “C” or above.

Clear background check.

Corequisite: HSER 2005.

HSER 2005: Internship Seminar

1.00 credit (1.00 lec)

This course is a biweekly meeting on campus for students currently engaged in their Human Services internships (HSER 2004 or HSER 2006). In this seminar, you will participate in a supportive forum with MCTC faculty advisors to discuss your internship progress and concerns and to explore common issues in the field.

Prerequisites: HSER 2003 passed with a grade of “C” or above.

Corequisites: HSER 2004 or HSER 2006.

HSER 2006: Internship for Community Healthcare Workers

4.00 credits (4.00 Int)

You may register for this internship ONLY if you have completed CMHW 1000 and CMHW 1015. Hours and assignments will be identical to but prorated from HSER 2004. Please see the course description for HSER 2004. Must be taken A–F.

Prerequisites: HSER 2003 passed with a grade of “C” or above; CMHW 1000 and CMHW 1015. *Clear background check.*

Corequisites: HSER 2005.

HSER 2998: Directed Study

Prerequisites: One course in HSER and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Information Studies

INFS 1000: Information Literacy and Research Skills

2.00 credits (1.00 lec/1.00 lab)

This course is an introduction to information skills including an understanding of how information and knowledge are produced and organized within a societal context; how to organize a strategy for finding information; how to use print and electronic sources including the Internet to locate information; and how to evaluate information found. This course fulfills the information literacy graduation requirement for students seeking an A.A. degree.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

INFS 2510: Necessary Illusions: A Critical Introduction to the Information Age

3.00 credits (3.00 lec)

This course explores the theories and definitions of the "Information Age" from a critical perspective. The course exposes the myths surrounding the Information Age and places it in the context of advanced industrial capitalism. The course will focus on issues of privacy and surveillance in a free society, the implications of mass media ownership by large corporations, and the role of the alternative press in a democratic society.

Fulfills MnTC Goal Area 9.

Prerequisite: ENGL 1110.

INFS 2520: Alternative Knowledge: How Radical Ideas are Communicated in Society

3.00 credits (3.00 lec)

This course examines the role of dissident knowledge in shaping and influencing a democratic society. You will be introduced to communication theories; the role of propaganda and consent in a democratic society; and how "mainstream" and "alternative" ideas shape our world views. The course will expose you to specific dissident communities and ideas from the 18th, 19th, and 20th centuries in the areas of politics, economics, and cultural and religious life.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisite: ENGL 1110.

INFS 2600: Ideas, Censorship and Politics:

3.00 credits (3.00 lec)

This course provides an introduction to print culture and the role of print media in the cultural and political life of communities throughout the world and throughout time. You will explore intellectual history and the role of the printed word in shaping culture; concepts such as censorship, bibliocide, and libricide (the destruction of books and libraries); and the history of scholarship and knowledge production.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisite: ENGL 1110.

Information Technology

ITEC 1100: Information Technology Concepts

2.00 credits (1.00 lec/1.00 lab)

This course provides an overview of the business data processing environment. Topics include computer hardware, software, input and output, the central processing unit, information storage and file processing, data communications, systems analysis, the computer programming process, programming languages, personal Information Technology, and issues and trends. If entering the Information Technology programs, you have the option of testing out of ITEC 1100 through successful completion of an online examination for credit. Must be taken A-F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

ITEC 1110: Information Technology Skills

2.00 credits (1.00 lec/1.00 lab)

This course provides you with an overview of skills you will need to communicate as IT professionals. It covers computer skills that introduce you to word processing, graphics, databases, spread sheets, business presentation programs, and Internet applications. This course is Web assisted. If entering the Information Technology programs, you have the option of testing out of ITEC 1110 through successful completion of an online examination. Must be taken A-F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

ITEC 1150: Programming Logic and Design

3.00 credits (2.00 lec/1.00 lab)

This course is a prerequisite for all computer programming courses and a required course for the Computer Support and Network Administration program. You will learn the basic principles of problem analysis, algorithm development, language selection, and program design and development. You will develop documentation and design logical solutions through flowcharting and pseudocode. MS Visual BASIC is used to develop simple applications. No prior computer programming experience is necessary. If entering the Information Technology programs, you have the option of testing out of ITEC 1150 through successful completion of an online examination. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

ITEC 1250: Microsoft Windows Operating Systems

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to the most important topics of the Windows Operating (OS) Systems, beginning with the desktop, property, recycle bin and online help. You learn to customize the desktop, work with drives, folders, and files, and use Find and Windows Explorer. You are also introduced to more advanced topics, such as troubleshooting Windows OS, working with a startup disk, using DOS with Windows, implementing a backup strategy, and optimizing disks with Scan Disk/Disk Cleanup and Disk Defragmenter; learn to work with applications, use object linking and embedding, and use the connectivity features of Windows OS with networks; and use basic DOS commands to understand the interaction between the user and the PC for command line language OS. This is a lecture and hands-on tutorial-based course. If entering the Information Technology programs, you have the option of testing out of ITEC 1150 through successful completion of an online examination. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

ITEC 1255: Macintosh Operating Systems

3.00 credits (2.00 lec/1.00 lab)

This course introduces the most important topics of the Macintosh Operating Systems (OS), beginning with the desktop, property, recycle bin and online help. You will learn to customize the desktop, work with drives, folders, and files, and use Find. You will learn advanced topics, such as troubleshooting Mac OS, implementing a backup strategy, and optimizing disks and Disk Defragmenter. You will also learn to work with applications and use the connectivity features of Mac OS with networks. You will use UNIX, a command line language, to understand the interaction between the user and the Mac. Students in the ITEC program have the option of testing out of this course (ITEC 1255) through successful completion of an online examination. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070 or MATH 0077.

ITEC 1310: Microcomputer System Maintenance

4.00 credits (3.00 lec/1.00 lab)

This course provides the operation, diagnosis, troubleshooting and simple maintenance of microcomputer components. You will learn hardware compatibility, system architecture, disassembly and reassembly of a personal computer, and installation of fixed and diskette units, memory chips, and circuit cards into expansion slots for use as emulators, fax/modems, and network adapters. Furthermore, you will learn about input devices, video displays, modems, printers and multimedia. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1250.

ITEC 1375: Database Design and Implementation

4.00 credits (3.00 lec/1.00 lab)

This course will help you learn to design, implement and manage database systems, teaching you database fundamentals and design, data storage and retrieval techniques, security, normalization, and administration of a database management system. You will reinforce these concepts by creating, maintaining, and naturalizing data using individual and group hands-on lab exercises. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150, ITEC 1250.

ITEC 1425: Data Communications

4.00 credits (3.00 lec/1.00 lab)

This course provides an introduction to data communications in business and industry. You will gain an understanding of data communications, terminals, modems, multiplexers, wire-based media, wireless transmission, optical transmission, satellite communication, protocols, flow control, error detection and correction, communications software, network topologies, local and wide-area networks, intranets, Internets, PC software, browsers, network architectures, ISDN, ATM, and network design and management. Furthermore, during lab, you will participate in projects in data communication applications, configure and install a modem, dial-up an information service, download files, transfer files between PCs, operate a PC remotely and more. Must be taken A–F.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

ITEC 1460: SQL Server Database Design and Implementation

4.00 credits (3.00 lec/1.00 lab)

The course builds on SQL Server database knowledge to help you prepare for database certification. You will gain hands-on design experience and develop databases using the Microsoft SQL Server relational database management system; gain an understanding of the product's architecture; and, through the accompanying labs, attain experience with procedures to plan, configure, and implement database solutions and cover all other objectives of the industry certification exam. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150, ITEC 1250.

ITEC 1465: MySQL Database Design and Implementation

4.00 credits (3.00 lec/1.00 lab)

This course is an introduction to the open source MySQL relational database software. You will install and configure the database software and a query tool in one or more operating system environments e.g. MS Windows, Linux. No prior database experience is necessary. You will learn to use the power of the MySQL dialect effectively and efficiently. Beyond developing queries and views, you will study issues of data security and integrity. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150, ITEC 1250.

ITEC 1475: Linux System Administration

4.00 credits (3.00 lec/1.00 lab)

This course provides hands-on, task-oriented projects, useful tips, and technical information to get you started using the Linux operating system. You will learn elementary operating system tasks, such as logging on and creating files, to advanced techniques, system commands, and operating system installation and configuration. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110 and ITEC 1150.

Prerequisite/Corequisite: ITEC 1425.

ITEC 1555: Web Programming

4.00 credits (3.00 lec/1.00 lab)

This course will help you learn to develop Web pages using HTML including hyperlinks, images, lists, tables, style sheets, forms and frames. Furthermore, you will program in JavaScript and perform simple programming tasks. As the culminating activity, you will develop a final project in which you create a website on the Internet, using what you learned during the course. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150 and ITEC 1250.

ITEC 1585: E-Commerce Development and Implementation

4.00 credits (3.00 lec/1.00 lab)

This course explores e-commerce applications of the Internet and intranets and the ways they can be used for business operations, management, marketing, and secure financial transactions. You will learn about Web-authoring theory and practice, as well as address legal and ethical questions. Furthermore, you will explore issues related to e-business implementation. Topics include the role of competition, consumer and business relationship considerations, and strategies for integration to existing business operations and legacy systems. You will study successful real-life implementations of e-business solutions. Must be taken A–F.

Prerequisite: ITEC 1555.

ITEC 1700: Visual C#.NET 1

4.00 credits (3.00 lec/1.00 lab)

This is the first of two courses in C#.NET programming on PCs. C#.NET is a well-established programming language that is used for creating software applications on many kinds and sizes of computers. C was standardized by ANSI, the American National Standards Institute, in 1990. C++ builds upon the C language by adding object-oriented classes and methods. You will enter code and create, test, and debug C#.NET programs. You will also write numerous short programs that demonstrate the abilities of the languages. Must be taken A–F.

ITEC 1725: Mobile Applications Development

4.00 credits (3.00 lec/1.00 lab)

This course, the first of two courses in mobile applications, is hands-on and task-oriented, covering the use of a Mobile Platform to implement market-driven, Web-based applications. You will learn several skills: creating and running common types of mobile programs; building user interfaces and navigation applets; constructing transitions, multi-touch events, networks and audio programs. You will design and implement your own mobile applications for evaluation. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150 and ITEC 1255.

ITEC 1750: Visual BASIC .NET 1

4.00 credits (3.00 lec/1.00 lab)

This is the first of two courses in Visual BASIC programming on PCs. Visual BASIC is a high-level, event-driven programming language for use in the Windows operating system. You will learn to enter code, manipulate Windows objects and apply object-oriented tools, which enable the building of custom visual applications with a familiar Windows “look and feel.” You will write, test and debug computer programs using Visual BASIC. Must be taken A–F.
Prerequisite: ITEC 1150.

ITEC 1771: Java 1

4.00 credits (3.00 lec/1.00 lab)

Java 1 is a hands-on task-oriented course that teaches you how to utilize the Java Platform to implement market driven, Web-based applications. You will learn how to create and run three common types of Java programs (applications, applets and servlets); how applications, applets, and servlets are similar and/or different; how to build a basic user interface that handles simple end-user input; how to read data from and write data to files and databases; and how to send and receive data over the network. This course takes you through the more common programming features available in the Java platform. You will submit your own design and implementation of Java programs for evaluation. You should have some experience with other computer languages and be familiar with common programming concepts such as displaying text or graphics or performing simple calculations. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1150, ITEC 1250 or approval or department chair; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

ITEC 1865: Global IT Business: Emerging U.S.-India Partnerships

3.00 credits (3.00 lec)

This course provides the opportunity to learn about how businesses are adapting to expanding globalization of business processes and information technology applications. In particular, you will learn how Indian businesses are partnering with U.S. firms; the diverse industries affected by these relationships, and an in-depth analysis of the benefits, potential pitfalls, and solutions that are likely to emerge through the coming decade. You will also address the need for innovation and development of niche industries to keep pace in a new world with a more level playing field. As part of the course, you will travel to HITEC City in Hyderabad, India and the IT centers in Bangalore, India. There are additional fees for travel.

ITEC 1950: Computer Telephony Integration

4.00 credits (3.00 lec/1.00 lab)

This course will teach you convergence technologies, giving you knowledge in both voice and data communications concepts and how the industry is implementing converged networks. You will learn about data communications, telecommunications, computer telephony integration, local area networks, broadband technologies, and voiceover IP. Each module contains a final examination that will lead to a Certified Convergent Network Technologies (CCNT) certification at the course's completion. Exam costs are included in the price of the training kit. Must be taken A–F.
Prerequisite: ITEC 1425.

ITEC 2075: Application Support and Resource Utilization

4.00 credits (3.00 lec/1.00 lab)

This course provides you the basics of user support for software, hardware and network through the utilization of important resources. You will develop skills in managing records; purchasing, negotiating and reviewing contracts; understanding and enforcing warranty and license agreements; developing procedures; shopping for the best price; and managing a budget. You will learn to understand the needs of technical support personnel, sales people, managers and end users; learn to install and support applications on a computer, and how to design and implement a help desk and provide user assistance; and create a troubleshooting guide and user manual. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1150 and ITEC 1250.

ITEC 2245: Computer Gaming Design and Development

4.00 credits (3.00 lec/1.00 lab)

This course provides hands-on development of games. You will survey a variety of software technologies relevant to games, including programming languages, scripting languages, operating systems, file systems, networks, simulation engines, and multimedia design systems. You will also study some of the underlying scientific concepts from computer science and related fields, including simulation and modeling, graphics, artificial intelligence, real-time processing, and game theory. Group projects will involve system implementation but emphasize design and use of existing tools and will require you to go through all phases of system conceptualization, specification, design, implementation, and evaluation. Must be taken A–F.

Prerequisites: ITEC 1555, ITEC 1750, or ITEC 1771.

ITEC 2400: Visual C#.Net 2

4.00 credits (3.00 lec/1.00 lab)

This is the second of two courses in C# programming on PCs. In this course, you continue to enter code, create, test and debug C# programs, but stronger emphasis will be placed on learning the use of C# object-oriented programming techniques using concepts of inheritance and polymorphism. You will write programs that include arrays, pointers, complex operators, structures, classes and other complex data types; and analyze and design programs using object-oriented theory and techniques. Must be taken A–F.
Prerequisite: ITEC 1700.

ITEC 2410: Applications Development Using Tools

4.00 credits (3.00 lec/1.00 lab)

This course is the second in the series of two courses that cover mobile applications. You will learn how to implement the advanced features and libraries of Mobile Applications using a variety of tools. You will learn several skills: developing platform-based programs; working with integration tools; using data and control structures; working with data types and expressions; building modular applications, classes and scripts; integrating databases; developing multithreading applications; programming drag-and-drop mechanisms; and developing security models. Must be taken A–F.
Prerequisites: ITEC 1725.

ITEC 2425: Infotech Project Management

4.00 credits (3.00 lec/1.00 lab)

This course helps you understand the importance of project management and its key role in the success of information technology projects. You will develop your familiarity with various IT methodologies and industry-recognized project management terminology and techniques. In addition, this course includes various individual and group projects to prepare you to become productive project contributors within the Information Technology industry. Must be taken A–F.
Prerequisites: ITEC 1100; ITEC 1110; and ITEC 1250 or ITEC 1255.

ITEC 2450: Visual BASIC .NET 2

4.00 credits (3.00 lec/1.00 lab)

This is the second of two courses in Visual BASIC programming on PCs. You will continue to write, test and debug computer programs using Visual BASIC. Programs written by you will include advanced techniques using dynamic link libraries, object linking and embedding, dynamic data exchange, dynamic controls and menus, and help screen development. You may also use Visual BASIC within the Microsoft Access database system. Must be taken A–F.
Prerequisites: ITEC 1750.

ITEC 2541: Java 2

4.00 credits (3.00 lec/1.00 lab)

Java 2 is a hands-on, task-oriented course that teaches you how to implement advanced features and libraries of the Java Platform. This course includes coverage on multithreading in Swing programs, JDBC2, CORBA (security), the drag-and-drop mechanism, and the Java security model, as well as complex GUI components. The course also explores the design of the Java collections framework and shows how to use the fundamental data structures that the standard Java library supplies. In addition, this course provides coverage on networking and remote objects. You will submit your own designs and implementations of Java programs for evaluation. Must be taken A–F.
Prerequisite: ITEC 1771.

ITEC 2555: Web Client/ Server Programming

4.00 credits (3.00 lec/1.00 lab)

This course builds on your knowledge of Web programming and covers advanced aspects of client-side Web programming. You will learn to implement server-side Web programming; learn about several popular scripting languages, build Web pages that contain dynamic content, integrate existing data into a Web page and apply methods of gathering information from site visitors; and apply scripting with JavaScript and use XML, schemas, and XSL, using a task-based approach. This course will also introduce you to the concepts of server-side programming, as well as to several methods to help you build dynamic Web pages. You will also apply methods for selecting and integrating data, using tools such as SQL Server and Coldfusion. Must be taken A–F.
Prerequisite: ITEC 1555.

ITEC 2710: Microsoft Network Administration

4.00 credits (3.00 lec/1.00 lab)

This course provides you with the skills to plan for, install, configure and administer Windows network servers and Windows desktop clients. You will become familiar with the concepts and basic administration of a local area network and understand how various components work together to build a functioning network system. Additionally, you will learn how to plan for deployment, develop security strategies, work with group policies and user profiles, configure access control, configure resource sharing, manage hardware and media, use the registry, monitor performance, administer Active Directory, configure DNS & DHCP, optimize, and troubleshoot. Must be taken A–F.
Prerequisites: ITEC 1100, ITEC 1110, ITEC 1250 and ITEC 1425.

ITEC 2725: Macintosh Network Administration

4.00 credits (3.00 lec/1.00 lab)

This course provides the skills to plan for, install, configure and administer Macintosh network servers and Macintosh desktop clients. You will become familiar with the concepts and basic administration of a local area network (LAN) and understand how various LAN components work together to build a functioning system. You will learn additional skills: planning for deployment; developing security strategies; working with group policies and user profiles; configuring access control and resource sharing; managing hardware and media; using the registry; monitoring performance; and troubleshooting. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1255, ITEC 1425.

ITEC 2775: Systems Analysis and Design

4.00 credits (3.00 lec/1.00 lab)

This course provides you with comprehensive and balanced coverage of systems analysis and design. The content of the course and built-in projects allow them to master the concepts and techniques from both the traditional, structured approach and the object-oriented approach to systems development. You will learn to emphasize fundamentals of systems analysis, while addressing the diverse development environments of today. Must be taken A–F.

Prerequisites: ITEC 1100; ITEC 1110, and ITEC 1250 or ITEC 1255.

ITEC 2795: Web Server and TCP/IP Implementation

4.00 credits (3.00 lec/1.00 lab)

This course provides you with a comprehensive coverage of various aspects of a TCP/IP-based network environment and enhances knowledge of various Internet Web-server architectures and implementations. You will develop skills related to TCP/IP design, implementation and troubleshooting in the first part of the course. Topics include standards, addressing, subnetting, DHCP, DNS, WINS, routing, remote access, Web services interface and security. In the second part, you will plan, design, and implement various Web services on the Windows Server platform primarily using IIS, with the option of working with other Web-server platforms. Must be taken A–F.

Prerequisite: ITEC 2710.

ITEC 2820: Wireless LAN/WAN Administration

4.00 credits (3.00 lec/1.00 lab)

This course provides a foundational understanding of the theoretical concepts of mobile and wireless technologies and helps develop skills associated with planning, designing, installing and configuring wireless LANs from the principal Wireless LAN vendors, and explores the interrelationship of their hardware, software, and applications. You will develop understanding and skills related to current mobile technologies, along with associated operating systems and standards. The future direction of the wireless and mobile devices, and the trend toward convergent technologies will also be covered. Must be taken A–F.

Prerequisite: ITEC 2710.

ITEC 2855: Computer Forensics

4.00 credits (3.00 lec/1.00 lab)

This course provides a foundational understanding of the field of computer forensics and imparts basic forensic analysis skills. You will gain forensics knowledge and skills on a foundation of operating systems administration and information security. You will cover a comprehensive range of topics, including a survey of forensics tools, crime scene processing, evidence control and data gathering. In addition to computer forensics analysis concepts, you will gain insight into investigative techniques and expert witnessing as they apply to this specialized field. Must be taken A–F.

Prerequisites: ITEC 2865.

ITEC 2865: Internet/Intranet Security: Implementation and Management

4.00 credits (3.00 lec/1.00 lab)

This course provides you with practical guidance in TCP/IP networking and cryptographic fundamentals, firewall technologies, access control services, communication security protocols for securing today's Internet applications, and public key infrastructures. You will build familiarity with the fundamentals of computer networks and distributed systems, cryptography and the use of cryptographic protocols in networked and distributed systems. You will also be introduced to the principles and best practices of computer forensics. Must be taken A–F.

Prerequisite: ITEC 2710.

ITEC 2880: Cisco Network Administration

4.00 credits (3.00 lec/1.00 lab)

This course provides you with the skills to manage Cisco LAN/WAN devices and environments through lectures, demonstrations, discussions, and hands-on labs. You will learn the OSI Reference Model, Cisco IOS commands, routing protocols such as RIP and IGRP, TCP/IP configuration and subnetting, router setup and configuration, network-switching concepts and configuration; and you will also understand WAN configuration and services. In addition to learning through lectures, demonstrations and discussions, you will be using router simulator software and actual Cisco routers and switches during hands-on labs. Must be taken A–F.

Prerequisites: ITEC 1100, ITEC 1110, ITEC 1250 and ITEC 1425.

ITEC 2890: Firewall Implementation and Management

4.00 credits (3.00 lec/1.00 lab)

This course provides the knowledge and skills needed to describe, configure, verify and manage various firewall products. You will develop understanding and skills related to the configuration of inbound and outbound translations and connections, filtering, intrusion detection, failover handling, and the implementation of a virtual private network between sites. If entering this course, you are expected to have a working knowledge of network administration and a solid grasp of TCP/IP and fundamental security concepts. Must be taken A–F.

Prerequisite: ITEC 2880.

ITEC 2895: Security Implementation and Risk Analysis

4.00 credits (3.00 lec/1.00 lab)

This course examines the principles, mechanisms, and implementation of network security and data protection with an emphasis on meeting business needs without compromising the integrity, availability, and confidentiality of data. You will gain skills in creating security policies, doing business continuity and disaster recovery planning, and analyzing risk. You will also gain understanding of the 10 key cybersecurity CBK domains, including access control systems and methodology, cyberlaw, ethics, security models, cryptography, and operations security. Must be taken A-F.
Prerequisite: ITEC 2710.

ITEC 2900: Information Technology Internship

2.00 credits (2.00 int)

In this internship, you will work and learn alongside computer professionals in an employer's workplace. This is an elective that requires advisor approval. This course is made available to Information Technology students nearing graduation who are not already employed in the computer field. Supervision is required. You must complete at least 80 hours of supervised work and be enrolled in the last semester prior to graduation. Must be taken A-F.

Prerequisites: Eligibility for graduation from an Information Technology program area. Faculty approval is required. Automobile transportation required for some sites. Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

ITEC 2910: LAN Implementation and Management

4.00 credits (3.00 lec/1.00 lab)

This course provides you with the skills to plan for, install, configure and administer Windows network servers and Windows desktop clients. You will become familiar with the concepts and basic administration of a local area network and understand how various components work together to build a functioning network system. Additionally, you will learn how to plan for deployment, develop security strategies, work with group policies and user profiles, configure access control, configure resource sharing, manage hardware and media, use the registry, monitor performance, administer Active Directory, configure DNS and DHCP, optimize, and troubleshoot. Must be taken A-F.

Prerequisites/Corequisites: ITEC 1475 or ITEC 2710 or ITEC 2725.

ITEC 2915: A+ Certification Prep

2.00 credits (2.00 lec)

This course provides you with industry certification-focused instruction on hardware, operating systems, and software fundamentals. You will apply content needed to pass the A+ Core exam and the latest coverage of memory, bus, peripherals, and wireless technologies for the A+ Operating Systems exam. If entering this course, you are expected to have a working knowledge of computer installation and systems maintenance.

Prerequisite: ITEC 1310.

ITEC 2920: Cisco CCNA Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on installing, configuring, and operating, LAN, WAN, and dial access services for networks. You will learn about various protocols and network technologies including IP, IGRP, Serial, Frame Relay, IP RIP, VLANs, RIP, Ethernet, and Access Lists. If entering this course, you are expected to have a working knowledge of Cisco switches and routers and TCP/IP; in the course, you will receive comprehensive instruction to prepare you for industry Cisco Certificate Network Associate (CCNA) certification.

Prerequisite: ITEC 2880.

ITEC 2925: Linux+ Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on installation, operation and troubleshooting of Linux operating systems. You will learn about fundamental open source resources/licenses, demonstrate knowledge of user administration, understand file permissions/software configurations, and manage local storage devices and network protocols. If entering this course, you are expected to have a working knowledge of the Linux environment; in the course, you will receive comprehensive instruction to prepare them for industry Linux+ certification.

Prerequisite: ITEC 1475.

ITEC 2930: MCP Client and Server Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on setting up and managing Windows 2000 Client and Server operating systems. You will learn about installing the Windows 2000 Server operating system; configuring the Active Directory; controlling access to system resources; configuring hardware devices and drivers; optimizing system performance, reliability, and availability; managing data storage and disks; configuring network connections; and implementing security. If entering this course, you are expected to have a working knowledge of the Windows client OS and Windows Server environment; in the course, you will receive comprehensive instruction to prepare you for the Microsoft MCP certifications for client and server.

Prerequisite: ITEC 2710.

ITEC 2935: Network+ Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on networking administration and support. You will learn about media and topologies, protocols and standards, network implementation, and network support. If entering this course, you are expected to have a working knowledge of networking and data communications concepts; in the course, you will receive comprehensive instruction to prepare you for the industry Network+ certification.

Prerequisite: ITEC 1425.

ITEC 2945: Security+ Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on general security concepts, communication security, infrastructure security, basics of cryptography and operational/organizational security. You will learn about managing and securing network services, network devices, and network traffic. If entering this course, you are expected to have a working knowledge of computer hardware, operating systems, and managing networks; in the course, you will receive comprehensive instruction to prepare you for the industry Security+ certification.

Prerequisite: ITEC 2865.

ITEC 2950: Information Technology Career Preparation

2.00 credits (2.00 lec)

This course helps graduating students prepare for entering the job market as computer programmers or computer support and network administrators. You will develop the skills and knowledge required to search for appropriate employment in your chosen computer field. Topics include self-assessment, résumé writing, advertisement terminology, letter writing and job search planning. You are encouraged to network with other computer professionals by attending job fairs, computer user group meetings and computer conferences. Recommended for students in the final semester of the program. Must be taken A–F.

Prerequisites: Eligibility for graduation from a Information Technology program area. Faculty approval is required.

Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

ITEC 2955: SQL Server MCP Certification Prep

4.00 credits (3.00 lec/1.00 lab)

The course builds on SQL Server database knowledge to help you prepare for database certification. You will gain hands-on design experience and develop databases using the Microsoft SQL Server relational database management system; gain an understanding of the product's architecture; and, through the accompanying labs, attain experience with the procedures to plan, configure, and implement database solutions and cover all other objectives of the industry certification exam.

Prerequisite: ITEC 1460.

ITEC 2960: Wireless Professional Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on RF behavior, and the features and functions of wireless LAN components. You will learn how to install, configure, and troubleshoot wireless LAN hardware peripherals and protocols. If entering this course, you are expected to have Network+, CCNA, CNA, or MCP certification or equivalent knowledge; in the course, you will receive comprehensive instruction to prepare you for Wireless Professional CWNA certification.

Prerequisite: ITEC 2820.

ITEC 2965: VB.Net MCP Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction in the skills required for you to build IT applications for Windows Forms by using the Microsoft .Net Framework. The course will cover the major topics for Windows client application programming on the .Net Framework. If you are already familiar with VB.Net development, in the course, you will receive aggressive training to prepare you for industry certification.

Prerequisite: ITEC 2450.

ITEC 2970: Visual C# .Net MCP Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on the skills required for you to build IT applications for Windows Forms by using the Microsoft .Net Framework. The course will cover the major topics for Windows client application programming on the .Net Framework. If you are already familiar with C# .Net development, in the course, you will receive aggressive training to prepare you for industry certification.

Prerequisite: ITEC 2400.

ITEC 2975: Sun SCJP Java Certification Prep

2.00 credits (2.00 lec)

This course provides you with certification-focused instruction on the syntax of the Java programming language; object-oriented programming with the Java programming language; creating graphical user interfaces (GUI), exceptions, file input/output (I/O), threads and networking. If you are already familiar with the Java Programming Language, in the course, you will receive aggressive instruction to prepare you for industry SCJP Java certification.

Prerequisite: ITEC 2541.

ITEC 2980: HTML/JavaScript Certification Prep

2.00 credits (2.00 lec)

This course builds on knowledge in HTML and JavaScript and provides certification-focused instruction on the skills required for you to use the features of the JavaScript language and design client-side, platform-independent solutions. This course also shows you how to correctly write JavaScript programs, script for the JavaScript object model, control program flow, validate forms, animate images, target frames, and create cookies. If you are already familiar with VB .Net development, in the course, you will receive aggressive training to prepare you for industry JavaScript certification.

Prerequisites: ITEC 1555.

ITEC 2981: XML Certification Prep

2.00 credits (2.00 lec)

This course builds on knowledge in XML and provides you certification-focused instruction on the skills required to build XML Web services and server components using Visual Basic .Net or Visual C# .NET. You will extend your 101/183 expertise through various skill-building exercises. If you are already familiar with XML, and either VB .Net development or Visual C#, in the course, you will receive aggressive training to prepare you for the industry MCAD certification.

Prerequisite: ITEC 2400 or ITEC 2450, ITEC 2555.

ITEC 2985: Project+ Certification Prep

2.00 credits (2.00 lec)

Building on your project management knowledge and experience, this course provides certification-focused instruction on conflict resolution, negotiation, communication, team building/leadership, and setting and mapping expectations. The course will show you traditional project management practices, as well as the problem-solving and communications skills required by project managers involved in such varied projects as product development, software development/engineering, EFP, and IT. In the course, you will receive aggressive training to prepare you for the Project+ industry certification.

Prerequisite: ITEC 2425.

ITEC 2990: Ethical Hacking and Network Defense

4.00 credits (3.00 lec/1.00 lab)

This course is an introduction to ethical hacking and security testing. You will learn to use tools and techniques that ethical hackers and security testers use to discover vulnerabilities and offer solutions to protect computer networks. You will learn about security testing concepts, documentation of security tests, ethical and legal ramifications, and many others.

Prerequisite: ITEC 1425.

ITEC 2998: Directed Study

Must be taken A–F.

Prerequisites: One course in ITEC; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

Japanese

JAPN 1000: Beginning Japanese 1

5.00 credits (5.00 lec)

Beginning Japanese 1 offers you the foundations for basic, contemporary, conversational Japanese. You will learn practical vocabulary and conversational patterns; the Japanese syllabaries—hiragana and katakana—which will be gradually introduced; and, by the end of the term, you will be able to write basic sentences. You will establish firm foundations for further development of your Japanese language skills.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

JAPN 1100: Beginning Japanese 2

5.00 credits (5.00 lec)

Beginning Japanese 2 offers a continuing foundation course for basic, contemporary, conversational Japanese. You will further develop basic sentences and conversational patterns. You will also learn Kanji and Kanji compounds to expand your working vocabulary. You will be prepared to effectively transfer to an intermediate-level course.

Fulfills MnTC Goal Area 8.

Prerequisites: JAPN 1000 or equivalent.

JAPN 2998: Directed Study

Prerequisite: One course in JAPN.

Journalism

JOUR 1000: Introduction to Mass Communications

3.00 credits (3.00 lec)

This course introduces the history and development of the mass media, focusing on magazines, newspapers, books, radio and television. You will learn communications theory and philosophies, including a review of the mass media in other countries; legal restraints and protections, particularly the First Amendment; advertising and public relations; technology and electronic news gathering; media ethics and the relation of the media to the political process; and the presentation of women and minorities in the media.

Fulfills MnTC Goal Area 9.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

JOUR 1100: Reporting and News Writing

3.00 credits (3.00 lec)

This course introduces the craft of news writing and reporting. You will focus on traditional news values; the basic news article; investigative and feature reporting; hard and soft leads; sources, interviewing techniques and background research, including use of the Internet; broadcast journalism and electronic news gathering; and media ethics and the law, with emphasis on the First Amendment.

Prerequisite: ENGL 1110.

JOUR 1200: Newspaper Activity

2.00 credits (2.00 lec)

This is a hands-on journalism workshop. After considering traditional news values and the elements of the news story, you may participate in the production of the College's newspaper. You will receive practical instruction in writing news stories and headlines, photography, layout, proofreading, copy editing, and advertising and distribution. Invited professional journalists will share their experience with the class. This class may be taken three times for a total of six credits.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

JOUR 2998: Directed Study

Prerequisites: One course in JOUR.

Law Enforcement

LAW 1215: Police and Community

3.00 credits (3.00 lec)

This course addresses the effect-oriented aspects of contemporary law enforcement. Specific topics include crime prevention, police-community relations, ethical decision-making, cultural diversity, bias-motivated crimes and interpersonal communications.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

LAW 1220: Juvenile Justice

3.00 credits (3.00 lec)

In this course, you will develop a knowledge of the Minnesota statutes relating to juveniles. You will explore the history and philosophies of the juvenile system, including theories related to causation and the effects of delinquency, as well as learn strategies for working with juveniles in the prevention of delinquency.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

LAW 1250: Introduction to Corrections

3.00 credits (3.00 lec)

This is an introductory course designed to provide you with an overview of the problems and ethical dilemmas that face America's correctional system. The institution of corrections is not only a study of our prison system, it is myriad complex inter-relationships among many components and institutions of society. This course will uncover the factors that influence corrections, both those who work and administer in corrections and the forces outside of the corrections industry.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

LAW 2251: Criminal Justice Service Learning Internship

1.00–3.00 credits (1.00–3.00 lab)

Service learning in Law Enforcement encourages students to develop an appreciation for individual rights and diversity within the community. Learning occurs in a variety of settings, including community-based organizations, law-enforcement-community-oriented policing units and criminal-justice-service organizations. Students provide a variety of services while learning through faculty-facilitated experiences.

LAW 2998: Directed Study

Prerequisite: One course in LAWE.

Library Information Technology

LIBT 1100: Introduction to Information Agencies

3.00 credits (3.00 lec)

This course surveys the history, organization, personnel and functions of libraries and information agencies in the United States. You will learn about major theories and ideas relevant to the field. You will discuss the various job opportunities that exist in information agencies and allied fields.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051 or instructor approval.

LIBT 1200: Introduction to Technical Information Services

3.00 credits (3.00 lec)

This course surveys all aspects of library and information agency technical services, including acquisitions, serials management, resource description and access, government documents management, collection maintenance, automation systems, and basic budget management. You will explore the philosophy, policies, and procedures of each service area and how they interrelate.

Prerequisites/Corequisites: LIBT 1100, or instructor approval.

LIBT 1300: Introduction to Public Information Services

3.00 credits (3.00 lec)

This course surveys all aspects of library and information agency public services, including circulation, interlibrary loans, reserves, reference and research services, and children's and young adult services. You will explore the philosophy, policies, and procedures of each service area and how they interrelate.

Prerequisites/Corequisites: LIBT 1100, or instructor approval.

LIBT 2200: Introduction to Cataloging

3.00 credits (3.00 lec)

This course introduces cataloging and classification of information resources, including print, audiovisual, and digital formats. You will apply cataloging metadata standards to create original and edit existing MARC records in OCLC. You will be introduced to Dewey Decimal and Library of Congress classification schemes. You will use Library of Congress Subject Headings and other controlled vocabularies for subject analysis of resources. You will be introduced to professional and ethical standards for cataloging, emphasizing user access to information.

Prerequisites: LIBT 1200, or instructor approval.

LIBT 2210: Introduction to Indexing and Abstracting

3.00 credits (3.00 lec)

This course introduces indexing and abstracting theory and practice. You will learn about metadata standards, language control, and index quality. You will practice back-of-the-book as well as information object indexing. You will work with traditional print resources and digital material. You will be introduced to professional and ethical standards for indexing and abstracting, emphasizing user access to information.

Prerequisites: LIBT 1200, or instructor approval.

LIBT 2300: Online Searching and Reference Services

3.00 credits (3.00 lec)

This course provides hands-on training in locating, searching, and evaluating a variety of web-based databases and virtual libraries. You will develop the skills necessary to effectively match the patron's request for information with the appropriate resources. You will explore ways of delivering electronic reference services and the dynamics of the online reference interview.

Prerequisites: LIBT 1300, or instructor approval.

LIBT 2500: Information Ethics and Legal Issues

3.00 credits (3.00 lec)

This course introduces you to ethical and legal issues related to information use and dissemination in libraries and society. You will examine the library profession's stance on intellectual freedom and censorship; ethical and legal theories of information; professional ethics and law; copyright and intellectual property; and security and privacy issues.

Prerequisites: LIBT 1200 and LIBT 1300, or instructor approval.

LIBT 2900: Library/Information Agency Internship

4.00 credits (4.00 int)

This internship provides structured on-the-job training in a library or information agency. You will work with an assigned site supervisor at an approved library or information agency to design a custom work plan, allowing you to develop your practical skills. You will also develop a working résumé and participate in an instructor-led seminar throughout the semester. Course must be taken pass/fail.

Prerequisites/Corequisites: LIBT 2200 or LIBT 2210, LIBT 2300.

Machine Tool Technology

MTTC 1000: Safety/Masurement/Metrology

4.00 credits (2.00 lec/2.00 lab)

This course covers general safety issues as they relate to machine shop operations. Information is presented on personal safety, fire, electrical, and chemical safety topics. The second half of the course introduces basic and precision measuring practices and instruments. Both English and metric measuring tools are covered. Metrology is studied to help you learn to achieve an acceptable level of quality control during inspection.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1010: Blueprint Reading 1

3.00 credits (3.00 lec)

Basic blueprint reading principles related to visualizing shapes, line usage, title blocks, dimensioning, sectional views, and tolerancing are taught in a classroom setting. Additional subjects include contours, angles, threads and machining details.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1015: Applied Machine Shop Math 1

2.00 credits (2.00 lec)

Both machine shop math and linear measurement theory are presented in this course. Common fractions and mixed numbers are added, subtracted, multiplied and divided.

Decimal fractions are also studied in a similar manner. Powers and roots of numbers are used to compute areas and volumes of geometric figures. English and metric units of measurement are studied as they are applied to steel rules, vernier calipers, micrometers, and gage blocks. Standard machine shop calculations involving speeds, feeds, thread and taper calculations are computed.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1020: Engine Lathe

5.00 credits (2.00 lec/3.00 lab)

Basic lathe operating theory is presented in a classroom and laboratory setting. Topics studied include cutting tools, lathe nomenclature and controls, and the many lathe machining operations. The laboratory portion of the course covers basic lathe machining operations, including turning, parting, and form tools.

Prerequisites: MTTC 1000, MTTC 1025, MTTC 1525 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1025: Drills and Drilling Machines

2.00 credits (2.00 lab)

This course covers drill presses, drills and drilling methods in a laboratory setting. The use of the drill press for tapping, counterboring, and reaming is studied. Hand and machine sharpening of drills is studied and practiced.

Prerequisites: MTTC 1000, MTTC 1525 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1030: Machine Trades for Related Careers

2.00 credits (2.00 lab)

This one-semester course is designed for students in careers related to the Machine Trades such as Industrial Engineering, HVAC-R, Construction Electricity, Fluid Power, Plastics and Precision Metal Forming. The theory and application of common machining operations will be emphasized.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1510: Vertical Milling

4.00 credits (1.00 lec/3.00 lab)

This course presents the theoretical aspects of vertical milling machine operation, including cutting; tool selection; clamping and indexing; workholding and fixturing; and feeds and speeds selection. The laboratory portion of the course covers safe operating practices, machine setup, cutting tool selection, and the use of various milling attachments. Sample parts will be produced to test your understanding of the subject matter.

Prerequisites: MTTC 1000, MTTC 1025, MTTC 1525 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1515: Applied Machine Shop Math 2

2.00 credits (2.00 lec)

The course is designed to teach you to apply algebra, geometry and trigonometry to obtain correct part dimensions from blueprints.

Prerequisites: MTTC 1015 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1520: Blueprint Reading 2

3.00 credits (3.00 lec)

Advanced blueprint reading principles are studied in this course. Topics include orthographic projection, section views, auxiliary views and rotated projections. Spur and bevel gear drawings, position dimensioning, tapered pipe thread specifications, and assembly drawings are analyzed.

Prerequisites: MTTC 1010 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1525: Benchwork/Power Saws

4.00 credits (1.00 lec/3.00 lab)

This course covers the use of various hand tools used on the bench, including the use of hand-held power tools for making prototype tooling and parts. Layout tools are demonstrated and used for the manufacture of tools and fixtures. Power saws and blades are studied in both a classroom and laboratory setting. Proper care and use of power hacksaws, bandsaws, friction, and saw blades are demonstrated.

Prerequisites: MTTC 1000 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 1530: Advanced Lathes Lab

4.00 credits (1.00 lec/3.00 lab)

Advanced lathe operations are conducted using soft jaws, face plates, radius tools and taper-turning attachments. Additional projects studied include eccentric diameters, acme threading, tapered pipe threads, and the use of a steady rest for machining long shafts. A variable-speed turret lathe with pneumatic bar feed is set up and operated with many of the turret tools available for this machine.

Prerequisites: MTTC 1020 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2005: Grinding

5.00 credits (2.00 lec/3.00 lab)

You will learn theory for both surface and cylindrical grinding and will apply theory to produce surface and cylindrical ground parts.

Prerequisites: MTTC 1520, MTTC 1525 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2010: Advanced Milling Lab

4.00 credits (1.00 lec/3.00 lab)

This course includes both basic horizontal milling machine work and intermediate vertical mill operations. It includes safety, setup, selection of tooling, indexing, and workholding methods for both horizontal and vertical mill operations. The use of milling attachments is also studied.

Prerequisites: MTTC 1510 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2020: Geometric Tolerancing

2.00 credits (2.00 lec)

This course teaches interpretation of geometric symbols and terminology in modern blueprints as related to the form, fit, and function of manufactured parts.

Prerequisites: MTTC 1520 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2035: CNC Programming and Operation

4.00 credits (3.00 lec/1.00 lab)

In this course, you will perform basic CNC (Computer Numerical Control) programming and operation including word address programming and absolute positioning.

Prerequisites: MTTC 1530, MTTC 2010 or instructor approval; ITEC 1100 (or test out); placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2040: CNC Milling Center

3.00 credits (1.00 lec/2.00 lab)

This course consists of complex CNC (Computer Numerical Control) programming and operation for milling applications.

Prerequisites: MTTC 1530, MTTC 2010 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2045: CNC Turning Center

3.00 credits (1.00 lec/2.00 lab)

This course consists of complex CNC (Computer Numerical Control) programming and operation for turning applications.

Prerequisites: MTTC 1530, MTTC 2010 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2055: Advanced Machining Skills

5.00 credits (1.00 lec/4.00 lab)

In this course, you will work with classmates as a team to produce complex parts from blueprints and assemble the machined parts into correct assemblies. You will utilize all machine tools to produce the parts, such as grinders, mills, lathes and other appropriate equipment. Use of the Bridgeport E-Z TRAK is encouraged. A team project is included.

Prerequisites: MTTC 1530, MTTC 2010; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2520: Welding for Machinists

2.00 credits (1.00 lec/1.00 lab)

This course covers all the basic welding processes as they relate to machine shop operations. Subjects covered include safety, oxy-fuel gas welding, brazing, silver soldering, SMAW (Arc) welding, GTAW (Tig) welding, GMAW (Mig) welding and the reading of welding blueprints. Welding equipment requirements and an introduction to welding metallurgy are also covered.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0080 or completion of MATH 0070.

MTTC 2998: Directed Study

Prerequisite: One course in MTTC.

Mathematics

ABE Mathematics

0.00 credits

This course is offered on campus free of charge by the Minneapolis Public Schools Adult Basic Education program. This course is designed for adults who need to learn or refresh their arithmetic skills. There are four units covered: whole numbers, fractions, decimals and ratios. Besides reviewing computational skills, each unit also includes estimating, using a calculator and problem-solving. Class activities include short lectures, small group work and lab activities. A four-function calculator is required.

MATH 0060: Preparing for Algebra and Technical Programs

This course prepares you for algebra and technical programs. You should be competent in whole numbers and decimals before taking this course, and you should need only a brief review of fractions and ratios. Topics include the following: percents, applications of ratio and percent, interpreting and constructing graphs, statistics (mean, median, mode), metric and English measurement, basic geometry concepts, and preparation for algebra. Class activities include short lectures, small group work and lab activities. Must be taken pass/no credit. **NOTE: For programs having a mathematics requirement of MATH 0060 only, students should take MATH 0060 instead of MATH 0077.**

Prerequisites: Placement into MATH 0060 or pass the on-campus Adult Basic Education exit test. *ESOL students:* Complete ESOL 0032 or place into ESOL 0042. *Native language students:* Placement into READ 0100 or above.

MATH 0070: Introductory Algebra

5.00 credits (5.00 lec)

This course is designed for students beginning the study of algebra or for those who need a review. Course content includes: signed numbers; integer exponents; operations with algebraic expressions; factoring; solving linear and quadratic equations in one variable; literal equations; solving linear inequalities in one variable; graphing linear equations in two variables; roots and radicals; word problems and modeling.

Prerequisites: Placement into MATH 0070 or completion of MATH 0060.

MATH 0075: Applied Intermediate Algebra

3.00 credits (3.00 lec)

Strong emphasis is placed on application of algebra and especially on current uses of function models (linear, quadratic, polynomial, rational, radical, logarithmic and exponential). The relationship among data, graphs and functions is thoroughly explored. Translating statements and questions from English into mathematics, answering those questions using algebraic procedures and then stating the results again in English will also be discussed in depth. Only symbolic manipulations that have immediate applications will be studied.

MATH 0075 is the minimum algebra preparation for MATH 1140: Introductory Statistics, MATH 1160: Mathematical Ideas, and MATH 1165: Mathematics for Teachers. This course does not prepare students for MATH 1110: College Algebra.

Prerequisites: Placement into MATH 0075 or completion of MATH 0070 or MATH 0077.

MATH 0077: Beginning Algebra with ALEKS

1-5 Variable credits

This course provides an alternate, self-directed way to learn beginning algebra concepts using ALEKS, a Web-based math assessment and learning system. First, ALEKS will determine your individual study plan and the number of credits you need to register for. In the classroom you will use ALEKS at your own pace with the help of an instructor. In the course you will demonstrate mastery of these concepts: arithmetic readiness; geometry and data analysis; real numbers and variables; algebraic expressions; linear equations and inequalities; literal equations; functions; graphing linear equations in two variables; integer exponents; polynomial arithmetic and factoring; rational expressions and proportions; radicals and rational exponents; and quadratic equations. **NOTE: For programs having a mathematics requirement of completion of MATH 0060 only, students should take MATH 0060 instead of MATH 0077.**

Prerequisites: Placement into MATH 0077 or MATH 0060.

MATH 0080: Intermediate Algebra

5.00 credits (5.00 lec)

This course is a continuation of MATH 0070: Introductory Algebra. Course content includes: sets and interval notation; functions and relations; systems of linear equations; compound inequalities; absolute value equations and inequalities; more polynomial factoring; rational expressions, functions, and equations; variation word problems; more literal equations; radicals, radical functions, and rational exponents; complex numbers; graphing quadratic functions; quadratic and rational inequalities; composition of functions; inverse functions; logarithmic and exponential functions and equations; and graphing circles.

Prerequisites: Placement into MATH 0080 or completion of MATH 0070 or MATH 0077.

MATH 0088: Intermediate Algebra with ALEKS

1-5 Variable credits

This course, a continuation of MATH 0077, provides an alternate, self-directed way to learn intermediate algebra concepts using ALEKS, a Web-based math assessment and learning system. First, ALEKS will determine your individual study plan and the number of credits you need to register for. In the classroom, you will use ALEKS at your own pace with the help of an instructor. In this course, you will demonstrate mastery of these concepts: real numbers and linear equations and inequalities; graphs and linear functions; systems of linear equations; exponents and polynomials; rational expressions and equations; variation applications; radicals and rational exponents; complex numbers; quadratic equations; solving radical and quadratic equations and inequalities; parabolas; functions; function composition and inverse functions; exponential and logarithmic functions and equations; distance and midpoint formulas; and circles.

Prerequisites/Corequisites: MATH 0077.

MATH 1110: College Algebra

4.00 credits (4.00 lec)

This course offers a comprehensive coverage of functions (polynomial, rational, root, logarithmic, exponential), and their graphs; conic sections; inequalities; complex numbers; the fundamental theorem of algebra; systems of equations; matrices; and linear and quadratic modeling. Additional topics may include sequence and series and the binomial theorem. Also offered as an online course.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1110 or completion of MATH 0080 or MATH 0088.

MATH 1120: College Trigonometry

3.00 credits (3.00 lec)

Topics in this course include trigonometric functions, graphs, identities, equations, multiple-angle formulas, inverse trigonometric functions, law of sines and cosines, vectors, trigonometric forms of complex numbers, De Moivre's theorem, equations in polar coordinates and their graphs, and applications.

Fulfills MnTC Goal Area 4.

Prerequisites/Corequisites: Placement into MATH 1120 or completion of MATH 1110.

MATH 1125: Precalculus

5.00 credits (5.00 lec)

This course is for students who have previously had high school algebra and trigonometry, but who are not prepared to start calculus, and want to take on a fast-paced refresher course covering precalculus topics. Topics will include: Functions—graphing and properties; polynomial and rational functions; modeling; fundamental theorem of algebra; exponential and logarithmic functions; trigonometric functions; trigonometric identities, formulas, equations, and inverses; systems of linear equations; partial fraction decomposition; polar coordinates; conics; and parametric equations.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1125 or completion with a grade of "A" in MATH 0080 or MATH 0088. Completion of MATH 1110 is not a prerequisite for MATH 1125.

MATH 1130: Finite Mathematics

3.00 credits (3.00 lec)

This course covers the business and social science applications of the following topics: systems of linear equations, matrices, linear programming, sets and counting, probability, Markov Chains, and mathematics of finance. *This course is also appropriate for liberal arts students seeking general education credits.*

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 or MATH 1125.

MATH 1140: Introductory Statistics

3.00 credits (3.00 lec)

Rather than statistical calculations, this course emphasizes the interpretation and evaluation of surveys, experiments, probabilities, graphic/tabular displays, data summaries, or other statistical reports encountered in daily life. Topics include: data collection, numerical and graphic summaries, basic ideas of probability, the normal distribution, estimation, hypothesis testing, correlation and regression, and index numbers.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1140 or completion of MATH 0075 or MATH 0080 or MATH 0088.

MATH 1150: Statistical Analysis

4.00 credits (4.00 lec)

This course is an introduction to the fundamental concepts of descriptive and inferential statistics, with an emphasis on applications. Course content includes: sample surveys and experiment designs; graphic presentation of data; measures of central tendency, variation and position; exploratory data analysis; introductory probability; random variables and probability distributions; binomial and normal distributions; the Central Limit Theorem; estimation; hypothesis testing; comparisons of two populations; correlation and regression; applications of chi-square; and analysis of variance (ANOVA). The course assumes that the student is familiar with basic computer applications software. Statistical software and/or statistical graphing calculators are introduced and used extensively.

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 or MATH 1125; CSCI 1100 or equivalent computer experience.

MATH 1160: Mathematical Ideas

3.00 credits (3.00 lec)

Topics in this course are selected from numeration systems, elementary number theory, elementary logic, problem-solving strategies, chaos theory, networks, topology, non-Euclidean geometry, counting methods and probability.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1160 or completion of MATH 0075 or MATH 0080 or MATH 0088.

MATH 1165: Mathematics for Teachers

4.00 credits (4.00 lec)

This course will develop the foundations of the mathematical topics taught in grades kindergarten through sixth and will also explore mathematical reasoning, problem-solving strategies and historical themes to recognize that mathematics is a way of thinking rather than a collection of rules. Topics will include number systems, algorithms and their rationale, geometry, number theory, and probability. This course is appropriate for future elementary teachers and also for secondary teachers whose intended license is other than math and/or science. Cannot be taken pass/fail.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1165 or completion of MATH 0075 or MATH 0080 or MATH 0088.

MATH 1170: Calculus for Business and Social Sciences

4.00 credits (4.00 lec)

This is a one-semester calculus course for prebusiness and social science students. Topics covered are: functions, limits, differentiation and integration of algebraic, exponential, logarithmic, and two-variable functions, with applications in social science and business. Students who need more than one semester should register for the first two semesters of the calculus sequence (MATH 1180 and MATH 1190).

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 or MATH 1125.

MATH 1180: Calculus 1

5.00 credits (5.00 lec)

This is part of a sequence designed for students intending to major in Mathematics, Physics, Engineering or other mathematics-dependent fields. Topics include the differential and integral calculus of single-variable real functions. Limit, continuity, derivatives, integrals and applications are covered.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 and MATH 1120 or MATH 1125 or placement into MATH 1180.

MATH 1190: Calculus 2

5.00 credits (5.00 lec)

This is part of a sequence designed for students intending to major in Mathematics, Physics, Engineering or other mathematics-dependent fields. Topics include integral calculus of single-variable real functions, infinite series and applications.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 4.

Prerequisite: MATH 1180.

MATH 2011: Discrete Mathematics

4.00 credits (4.00 lec)

This course is intended to give students studying computer science the mathematical foundation they will need for their future studies, but it may be taken by students in a wide variety of majors, including Mathematics and Engineering. Topics covered will include: logic, sets, functions, sequences, complexity of algorithms, number theory, matrices, methods of proof, mathematical induction, recursive algorithms, counting methods, discrete probability, relations, graphs and tree fundamentals.

Fulfills MnTC Goal Area 4.

Prerequisites: MATH 1110 or MATH 1125.

MATH 2210: Linear Algebra and Differential Equations

5.00 credits (5.00 lec)

This course covers linear algebra, with an emphasis on eigenvalues; introduction to differential equations, including linear differential equations with constant coefficients, solved using eigenvalues; and series solutions and numerical methods for linear and nonlinear differential equations and systems.

Prerequisite: MATH 1190.

MATH 2220: Multivariable Calculus

5.00 credits (5.00 lec)

This course covers algebra and geometry of vectors in two- and three-dimensional space; velocity, acceleration and curvature; functions of several variables; partial derivatives and chain rule; max/min problems; Lagrange multipliers; double and triple integrals; parametric form of curves and surfaces; polar, cylindrical and spherical coordinates; integration on curves and surfaces; vector fields; theorems of Green and Stokes; and Divergence Theorem.

Prerequisite: MATH 1190.

MATH 2998: Directed Study

Prerequisites: Completion of one college-level math course and department approval.

Media Production

MPRO 1111: Introduction to Dynamic Media Software

3.00 credits (2.00 lec/1.00 lab)

This course provides beginning media students with a foundation in the aesthetics, toolsets, and procedures used in the business of content creation with Dynamic Media. You will work with still and moving images and sound while you examine and evaluate existing media content and the tools and processes used in their creation. You will study and recognize the underlying technology used in digital communications containing sound and picture. You will use industry-standard tools from Adobe and Apple on both the Macintosh and Windows platforms.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

MPRO 1120: Media Systems

3.00 credits (2.00 lec/1.00 lab)

This course will systematically look at both analog and digital systems used in the field of Media Production. Beginning with basic systems theory, you will learn the hows and whys of designing and constructing hardware systems for both the production and presentation of media projects.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

MPRO 1150: Scriptwriting for Media

3.00 credits (3.00 lec)

This course covers the basics of design for communication in media formats. Emphasis is placed on basic organization, and the preparation of treatments and scripts to meet specific objectives for defined audiences. Programming areas examined include instructional, commercial and public service communications. You will also examine, outline and write scripts for interactive media.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

MPRO 1200: Audio for Dynamic Media

3.00 credits (2.00 lec/1.00 lab)

This course covers basic design and production concepts, equipment operation, safety and maintenance concerns. Emphasis is placed on understanding basic magnetic recording/reproduction, specific audio communication techniques and group-based production. The course provides you with exposure to the realities of professional, systems-based production, as well as to magnetic recording media. It also engages you to determine the when, why and how of using music in a media production. You will be required to provide your own set of audio headphones. An associated laboratory is recommended.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 1201: Video Basics-Single Camera

3.00 credits (2.00 lec/1.00 lab)

This course provides Media students with basic production skills using various digital video cameras and editing tools. You will explore fundamental single-camera video production utilizing elements of lighting, sound, graphics, camera work and editing. You will work with multiple cameras, including single and three-chip cameras, as well as Standard Definition and Hi-Definition camcorders.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 1202: Digital Animation Basics

3.00 credits (2.00 lec/1.00 lab)

This course provides computer animation novices with an introductory experience with two-dimensional and three-dimensional computer-based animation. Output will be in digital file formats and will also be printed to VHS videotape. You will study morphing of still and motion images, basic 3D modeling and animation, and digital-audio soundtrack creation as you develop skills, functional knowledge and techniques through lecture/demonstration, completion of assignments, and final projects. You will be required to purchase a minimum of two Iomega zip-drive disks and provide your own set of audio headphones. An associated lab is recommended.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 1203: Motion Graphics Software

3.00 credits (2.00 lec/1.00 lab)

This course provides you with an in-depth exploration of the field of motion graphics, also known as compositing. You will design and build short animations utilizing 2D and 3D planes to communicate to specified objectives. You will use industry-standard Apple and Adobe software, and adopt production pipelines and output options.

Prerequisite/Corequisite: MPRO 1150.

MPRO 2100: Advanced Audio for Media

3.00 credits (2.00 lec/1.00 lab)

This course provides media students with advanced production experience creating, mixing, and outputting high-end audio tracks for dynamic media productions such as DVD, HDTV, and Digital Cinema. You will work with Pro-Tools and other software and hardware tools to compose, mix, sweeten and deliver 5.1 surround-sound audio tracks for visual media. You will work on loop-based composition, MIDI, Foley techniques, and ADR. You will also use specific mix-to-picture tools from Adobe and Apple on both Macintosh and Windows platforms.

Prerequisite: MPRO 1200.

MPRO 2101: Real-Time and Multi-Camera Video

3.00 credits (2.00 lec/1.00 lab)

This course provides media students with production experience using live video and television technology. You will shoot and edit videos of events/performance using multi-camera and live mix-to-tape technology. You will organize and work in teams, as you design and record events in industry-standard video formats and methodologies. You will also study multi-camera post-production technology and techniques.

Prerequisite: MPRO 1201.

MPRO 2111: Interactive Design and Production

3.00 credits (2.00 lec/1.00 lab)

This course provides practical experience in the production and distribution of 21st century interactive media. You will design and create interactive titles including DVDs, and study the design principles used in successful interactive media development. You will develop both tactile disc-based and network-delivered media products.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 2113: Independent Project

1.0 credits (1.00 lab)

This course provides you with equipment and software access on a self-directed basis. You will plan and complete a project using the dynamic media tools of choice, as determined by both you and your instructor.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 2230: Advanced 3D Animation

3.00 credits (2.00 lec/1.00 lab)

This course covers advanced three-dimensional issues, including modeling, animating, rendering and outputting computer-generated animation files. You will use a variety of software packages to deeply explore the 3D animation medium used extensively in multimedia and TV broadcasting. An associated lab is recommended. You will be required to purchase a minimum of two Iomega zip disks and provide their own headphones.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

MPRO 2390: Advanced Production Lab 1

1.0 credits (1.00 lab)

This is an independent study course intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisites/Corequisites: MPRO 1111, MPRO 1150 or instructor approval.

MPRO 2391: Advanced Production Lab 2

2.00 credits (2.00 lab)

This is an independent study course intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisites/Corequisites: MPRO 1111, MPRO 1150; or instructor approval.

MPRO 2392: Advanced Production Lab 3

3.00 credits (3.00 lab)

This is an independent study course intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Prerequisites/Corequisites: MPRO 1111, MPRO 1150 or instructor approval.

MPRO 2440: Business of Media

2.00 credits (2.00 lec)

This course covers basic media business concerns. You will learn types and elements of communication, business structures, record-keeping techniques and tax necessities, résumé essentials and interviewing techniques, budgets, bids, and personal/company promotional tactics. You will produce personal promotional materials and design and print collateral materials including business cards, résumés and letterhead. You will respond to a request for proposal (RFP) with a formal written proposal and bid.

Prerequisites/Corequisites: MPRO 1111 and MPRO 1150.

MPRO 2450: Portfolio Show

3.00 credits (2.00 lec/1.00 lab)

This course covers basic promotional design, production, and marketing concepts and techniques. You will produce/update your personal résumé and portfolio components, and generate professional presentations. In order to complete the course, you must successfully participate in the MCTC Portfolio Show.

Prerequisite: MPRO 2101.

MPRO 2470: Internship

3.00 credits (3.00 int)

This class provides on-the-job work experience with emphasis on management by objective, as jointly determined by the student, instructor and internship supervisor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Corequisites: Current enrollment the MPRO program and at least (2) full semesters in the MPRO program.

MPRO 2998: Directed Study

Course credits not provided — see instructor.

Course description not provided — see instructor.

Prerequisites: One course in MPRO; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

Music

MUSC 1000: Introduction to Music

3.00 credits (3.00 lec)

This is an overview course for anyone who appreciates music and wants to understand musical styles better. You will study music from America's popular idioms of jazz, gospel, pop and rock; music of non-Western cultures; and music of the Western European art form. The course emphasizes listening and discussion.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1010: American Popular Music 1

3.00 credits (3.00 lec)

This course traces the evolution of the "classical" music form of the United States known as jazz. Beginning with its European and African roots, you will study the precursors of work songs and the blues, to the many subgenres found today. You will gain an understanding of the immense diversity found in jazz and be able to identify key performers, composers, arrangers and performances of these styles.

This course is suitable for those who consider themselves musicians, as well as for those who only play the radio. The course is taught through audio/video examples, lectures, in-class and online discussions with an emphasis on the interrelatedness of jazz and United States history and culture.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1020: American Popular Music 2: The History and Development of Rock 'n' Roll

3.00 credits (3.00 lec)

This course surveys America's popular musical form, rock 'n' roll, from its European and African roots through its precursors found in the blues, to the many subgenres such as heavy metal, neo-soul, punk and hip hop. By tracing rock's evolution, you can expect to gain an understanding of the immense diversity found in rock 'n' roll and to be able to identify key performers and performances of these styles. The course is taught with emphasis on listening and class discussion.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1030: The Music of Latin America and the Caribbean

3.00 credits (3.00 lec)

This course serves as an overview of the musical styles, genres and performers of Latin America and the Caribbean. Through lecture, demonstrations, audio and video presentations, class discussions, and performance, you will gain an understanding of the ways in which culture and music interact and are impacted.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1040: The Music of Africa

3.00 credits (3.00 lec)

This course serves as an overview of the musical styles, genres and performers of the African continent. Through lecture, demonstrations, audio and video presentations, class discussions, and performance, you will gain an understanding of the ways in which culture and music interact and are impacted.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1050: The Music of Asia

3.00 credits (3.00 lec)

This course serves as an overview of the musical styles, genres and performers of North, East, South and Southeast Asia. Through lecture, demonstrations, audio and video presentations, class discussions, and performance, you will gain an understanding of the ways in which culture and music interact and are impacted.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1060: Introduction to World Music

3.00 credits (3.00 lec)

This course presents an overview of the music of four major cultural groups representing Asia, Africa, Latin America/Caribbean and Native North America. In this course, you will learn to explore the music of these groups to compare and contrast musical genres, as well as relate the music to each culture's values, beliefs, and sense of identity. You will accomplish this through readings, lectures and discussion both in class and online. Audio and visual examples will be provided. You will also learn to perform songs from each group.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1150: Fundamentals of Music

3.00 credits (3.00 lec)

This course introduces the basic vocabulary of music terms, symbols, and elements needed for music reading and writing. You will learn the basics of standard music notation, scales, intervals and chords, and their relationship to the piano keyboard and to sound itself. This course will prepare you for private study, music ensemble participation and further work in music theory.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

MUSC 1160: Music Theory and Design

3.00 credits (2.00 lec/1.00 lab)

This course completes the survey of materials begun in MUSC 1150. You will continue study of the major components of the tonal music system as it applies to Western classical and pop music: chord inversions and sevenths, part-writing, guitar symbols, progressions, and harmonic analysis. You will also explore modes, the blues and nontonal music; begin to train your ears to recognize performed pitches, rhythms, and intervals and to write them as notation; and gain a general understanding of the nature of artistic form and design in sound.

Fulfills MnTC Goal Area 6.

Prerequisite: MUSC 1150.

MUSL 1210: College Choir

1.00 credit (1.00 lec)

This group is a nonauditioned choir designed to be a creative musical opportunity in an atmosphere that is enjoyable and noncompetitive. You will perform publicly at least once each semester. You will prepare music spanning a wide range of styles from classical to world music. The College Choir is open to all students who enjoy singing and are willing and able to commit to consistent attendance at rehearsals and scheduled performances, and to working to create art as part of a group.

MUSL 1220: Vocal Ensemble

1.00 credit (1.00 lec)

This group is a select choir that sings primarily unaccompanied choral music from around the world. The choir is designed to provide a performing opportunity for the experienced singer. This choir performs publicly at least once each semester.

Prerequisite: Audition/interview with director.

MUSL 1230: Chamber Ensemble

1.00 credit (1.00 lec)

This group prepares classical works and indigenous folk music for recital. In this course, you will work in groups as small as duets and as large as the total class size, learning repertoire suited for chamber ensemble. You will perform at least once per semester on campus. Additional performance opportunities are scheduled as time and availability of the ensemble members permits.

Prerequisites: Students must be able to read music at an intermediate level or better and provide their own instrument, with the exception of piano. While it is not mandatory, an applied lesson on the student's instrument is highly recommended.

MUSL 1240: Jazz Ensemble 1

1.00 credit (1.00 lec)

Music from the swing era through the Latin/Caribbean-influenced genres to jazz-rock fusion are studied and played in this instrumental ensemble. The focus is on arrangements for a small jazz combo rather than a big band. You will perform at least once per semester on campus. Additional performance opportunities are scheduled as time and availability of the ensemble members permits.

Prerequisites: Students must be able to read music at an intermediate level and provide their own instrument, with the exception of a drum trap kit and piano. While it is not mandatory, an applied lesson on the student's instrument is highly recommended.

MUSL 1500–1900: Applied Music

2.00 credits (2.00 lec)

This course consists of weekly private lessons, each one-half hour in length, on your chosen instrument. Learning is optimized to your individual level, from beginner to advanced. Instructors will place emphasis on developing your musicianship as well as technical skill. Significant practice time outside of the lesson is expected. A number of practice rooms with pianos are available in the Music Department. Aside from piano, you are expected to provide your own instruments. There is an added course fee for applied music. *You must contact your chosen instructor prior to registration. See class schedule for instruments offered and instructors available.*

MUSL 2500–2900: Applied Music

4.00 credits (4.00 lec)

This course, for more advanced, serious students, consists of weekly private lessons on their chosen instruments, one hour in length. Learning is optimized to your individual level. Instructors will place emphasis on developing your musicianship as well as technical skill. A number of practice rooms with pianos are available in the Music Department. Aside from piano, you are expected to provide your own instruments. Requirements are effectively doubled in relation to 1000-level applied music lessons: lesson time is one hour per week, associated practice and preparation time is doubled, and the added course fee is doubled.

You must contact your chosen instructor prior to registration. See class schedule for instruments offered and instructors available. Prerequisite: Instructor approval.

MUSC 2998: Directed Study

Prerequisite: One course in MUSC.

Nursing

NURS 1000: Foundations of Nursing

3.00 credits (3.00 lec)

The Foundations of Nursing course introduces the student to the concepts of cultural diversity, wellness, holism and the role of the nurse. Other concepts include asepsis, nutrition, psychological care, sexuality and pain management. Body systems are introduced, with an emphasis on the neurological, respiratory, gastrointestinal and genitourinary systems. Physical comfort and safety, care of the older adult, and perioperative care are also addressed.

Prerequisite: Admission to the Nursing program.

Prerequisites/Corequisites: BIOL 2224 and PSYC 2240.

NURS 1050: Clinical Foundation

3.00 credits (3.00 lab)

This clinical course provides opportunity to apply basic theory and implement skills in a variety of inpatient settings. You will utilize the nursing process to collect data, implement nursing interventions and administer medication. Emphasis is placed on organization, critical thinking, therapeutic communication and a holistic approach to client care. Concepts of health promotion, illness prevention and restoration of health are included.

Prerequisites: NURS 1075 and NURS 1200. Clear background check.

Prerequisites/Corequisites: BIOL 2224, NURS 1000, NURS 1250 and PSYC 2240.

NURS 1075: Nursing Interventions

2.00 credits (2.00 lab)

Nursing Interventions is an on-campus, lab-based course. Content correlates with the Foundations of Nursing course. The nursing process is introduced and competencies relating to critical thinking, asepsis, oxygenation, nutrition, elimination, and the neurological system are demonstrated and validated. Medical terminology is threaded throughout the course.

Prerequisites/Corequisites: NURS 1000 and BIOL 2224.

NURS 1115: Pharmacology in Nursing

2.00 credits (2.00 lec)

This course provides a theoretical framework for the study of groups of medications. Prototypes of various classifications are presented to enable you to learn methods of action, therapeutic and adverse effects, actions, and related nursing responsibilities. Emphasis is on utilization of this knowledge in application of the nursing process.

Prerequisites: BIOL 2224; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070. Admission to the Nursing program or permission of instructor. This course is not required for the P.N. Diploma or A.S. Degree/Nursing.

NURS 1200: Medication Administration 1

1.00 credit (0.50 lec/0.50 lab)

Medication Administration 1 is a lecture/lab course that introduces you to the concepts of critical thinking and safe nursing practice in the administration of nonparenteral medications. The focus is on nonparenteral routes including oral, topical, nasal, rectal, eye and ear. Medical terminology and abbreviations are threaded throughout the course. Students successfully completing this course will have fulfilled course requirements for the Trained Medication Aide TMA.

Prerequisites: Admission to the Nursing program.

Prerequisites/Corequisites: BIOL 2224 and NURS 1000.

NURS 1250: Medication Administration 2

1.00 credit (0.50 lec/0.50 lab)

Medication Administration 2 expands your knowledge of medication administration to include parenteral, enteral (via gastric tube) and respiratory routes of administration, further study of drug classifications and correlation of lab values to medication dosage through new learning and more advanced application of critical thinking and safe nursing practice. Dosage calculation, based on dimensional analysis, medical terminology and abbreviations are threaded throughout the course.

Prerequisites: Admission to the Nursing Program; NURS 1200.

Prerequisites/Corequisites: BIOL 2224 and NURS 1000.

NURS 1300: Application of Nursing

4.00 credits (4.00 lec)

Application of Nursing introduces you to alterations in functioning, including basic disease processes. The integumentary, respiratory, gastrointestinal, genitourinary, endocrine, cardiovascular, hematological, neurological, neurosensory and musculoskeletal systems are included. Oncology; end-of-life care; and body responses to stress, disease and therapeutic interventions are incorporated. Nursing interventions, critical thinking, therapeutic communication and complementary therapies are discussed.

Prerequisites: BIOL 2224; PSYC 2240; NURS 1000, NURS 1075, NURS 1200 and NURS 1250.

Prerequisites/Corequisites: NURS 1050 and ENGL 1110.

NURS 1350: Clinical Application

4.00 credits (4.00 lab)

This clinical course facilitates application of complex theory and nursing interventions in a variety of inpatient settings. Holistic application of the nursing process and development of organizational and critical thinking skills in caring for multiple clients is emphasized.

Prerequisites: Completion of semester 1; BIOL 2224 and PSYC 2240. Clear background check.

Prerequisites/Corequisites: NURS 1300 and ENGL 1110.

NURS 1425: Family Nursing

4.00 credits (2.00 lec/2.00 lab)

Family Nursing introduces you to the childbearing/childrearing family. You will learn about psychosocial, normal physical and abnormal conditions of pregnancy; the health and illness of the newborn through the adolescent; and the influence of the community on the family. You will also apply growth and development theory to direct client care. The clinical component includes on-campus lab and community-based care in pediatric and maternity settings. You will apply critical thinking, therapeutic communication, nursing interventions, and holistic approach in caring for childbearing and childrearing families.

Prerequisites: Completion of semester 1, BIOL 2224 and PSYC 2240. Clear background check.

Prerequisites/Corequisites: NURS 1300 and NURS 1350.

NURS 1550: Complementary Therapies: A Service Learning Approach

1.00 credit (1.00 lec)

This course explores various healing modalities from around the globe, which can complement traditional Western or allopathic medicine. You will complete 10 hours of community service and, through writing and discussions, reflect on the benefits of holistic healing for communities as well as individuals.

Prerequisite: Admission into the Nursing program.

NURS 1600: Psychosocial Nursing

2.00 credits (2.00 lec)

Psychosocial Nursing introduces you to concepts in mental health and mental illness. The impact of culture and value systems on mental health is discussed. Included are topics relating to medication therapy, behavioral therapy, crisis intervention, group therapy, therapeutic nursing interventions, and complementary therapy.

Prerequisites: Completion of semester 1; BIOL 2224 and PSYC 2240.

Prerequisite/Corequisite: NURS 1300.

NURS 1850: Transcultural Nursing: A Service Learning Approach

1.00 credit (1.00 lec)

This course explores the influences of culture and the traditions of service as integral to holistic nursing practice. Through writing and presentations surrounding a 10-hour service-learning project, you will prepare for practice in a culturally diverse environment.

Prerequisite: Admission into the Nursing program.

NURS 1885: Introduction to Chinese Healthcare with a Cultural Emphasis

3.00 credits (3.00 lec)

This course provides the opportunity to learn about both traditional and contemporary Chinese healthcare in a broad, cultural context. You will travel to China and explore today's nursing and medical care and Traditional Chinese Medicine in a classroom setting, while also directly observing current Chinese medical and nursing practice. You will have the chance to study and interact with Chinese nursing students in both academic and practice settings. In addition, you will be introduced to the basics of spoken Mandarin, Chinese culture and Chinese perspectives on the world.

Prerequisite: Admission to Nursing program or permission of instructor.

NURS 1900: Nursing Role Transition

2.00 credit (2.00 lec)

Nursing Role Transition is for the licensed practical nurse returning to nursing education. You will learn and analyze program philosophy, framework, differentiated scope of practice, the nursing process, current trends and issues in healthcare. You will engage in assessment, planning, implementation, and educational aspects of the care surrounding patients with selected problems.

Prerequisites: Licensed Practical Nurse, admission to the Nursing program.

NURS 1950: Nursing Role Transition Practicum

1.00 credit (1.00 lab)

This 32-hour clinical lab course is designed to transition the licensed practical nurse into registered-nurse-level abilities. Application of the nursing process, critical thinking, nursing interventions and therapeutic communication skills are emphasized in on-campus lab and direct client care settings.

Prerequisites: Licensed Practical Nurse, admission to the Nursing program. Verification of 1800 abilities for Non-Minnesota residents who graduated prior to 1983 are validated in this course. Clear background check.

Prerequisite/Corequisite: NURS 1900.

NURS 2000: Integration of Nursing

3.00 credits (3.00 lec)

This course marks a transition from the practical nurse role to the professional nurse role. You will focus on planning and managing client care and teaching health behaviors across the life span. In planning the care of clients, you will integrate many nursing concepts: complementary therapies, health promotion, knowledge of acute and chronic illness patterns, diagnostic studies, and pharmacological principles. This course will emphasize care of medical-surgical clients. You will also review nursing management of other clients; maternity, pediatric, and mental health. You will apply analytical and critical thinking skills in working with clients and their families.

Prerequisites: NURS 1300, NURS 1350, NURS 1425, NURS 1600 and ENGL 1110. Completion of NURS 1900 and NURS 1950.

Prerequisites/Corequisites: BIOL 2225 and NURS 2010.

NURS 2010: Health Assessment

3.00 credits (2.00 lec/1.00 lab)

Health Assessment students learn to perform a comprehensive health history and physical examination. This skill enhances your ability and is central to effective interventions. The development of a holistic database reflecting an understanding of developmental, sociocultural, environmental, sexual and family influences is emphasized. Further emphasis is on the development of communication skills that enhance data-gathering techniques, health teaching and referral skills. Complete health examinations focus on the identification of normal patterns and functions of adults and children.

Prerequisites: BIOL 2224; PSYC 2240; and completion of semester 1 of Nursing Program or Mobility Ready.

Prerequisites/Corequisites: NURS 1300, NURS 1350 and NURS 1425 or Mobility Ready.

NURS 2050: Clinical Integration

4.00 credits (4.00 lab)

This clinical course focuses on the professional nursing role. You will learn how to integrate the various components of the nursing process: assessment and analysis of client data, care plan development, and the evaluation and revision of care plans. The course emphasizes your role as a professional nurse in health teaching, discharge planning and writing health care referrals. You will gain clinical experience with clients across the life span and health-illness continuum, including care of clients in maternity, pediatric, mental health and medical-surgical settings.

Prerequisites: Completion of NURS 1900 and NURS 1950. Clear background check.

Prerequisites/Corequisites: NURS 2000 and BIOL 2225.

NURS 2100: Synthesis Theory

3.00 credits (3.00 lec)

This capstone theory course will provide you with the opportunity to synthesize the holistic care of the patient with multiple, complex needs. The impact of illness on the health of individuals, families and communities will be addressed. Theoretical foundations of the role of the professional nurse as case manager and patient advocate are included. Scope of practice, delegation, supervision, and legal issues in healthcare are discussed.

Prerequisites: NURS 2000, NURS 2010 and NURS 2050

Prerequisite/Corequisite: BIOL 2226.

NURS 2150: Synthesis Clinical

5.00 credits (5.00 lab)

This clinical course provides you with an opportunity to assess diverse client populations, implement therapeutic interventions for clients with multiple needs and assess the impact of illness on family processes. Emphasis is placed on environmental influences in individual and family health. You will have the opportunity to explore the leadership role of the professional nurse in the clinical setting and provide service to the community through a student-learning project that assesses a community-based need. Precepted clinical experiences are available.

Prerequisites/Corequisites: NURS 2100 and BIOL 2226. Clear background check.

NURS 2300: Perioperative Nursing

3.00 credits

This course is designed to provide nurses with an understanding of the operating room (OR) nurse's role and responsibilities. Participants will learn the theory, principles and skills necessary for an entry-level position in the operating room. The perioperative nursing course is based on the Association of Perioperative or Operative Registered Nurses (AORN) Standards and Recommended Practices. This course is intended for: Registered nurses who are interested in learning basic operating room nursing; OR-experienced nurses in need of a refresher course; second-year nursing students with a strong academic background and high interest in OR nursing. Course objectives include: identifying nursing competencies to provide safe patient care in the perioperative setting; differentiating nursing responsibilities from those of the rest of the surgical team; applying knowledge of perioperative nursing to develop a plan of care for a surgical patient. If you have not taken college credit courses at MCTC in the past, you will need to complete a College Application form to complete your registration process. You will be sent an application when you register that must be completed and returned with a \$20 application fee.

NURS 2550: Clinical Internship Elective

1.00 credit (1.00 int)

This elective clinical internship course provides you with learning opportunities to apply nursing theory to a nursing practice. The focus is on gaining depth of understanding of the role of the registered nurse, as well as strengthening nursing skills in the clinical setting. You will be precepted by nurses in the practice setting and by nurse faculty. Must be taken pass/fail.

Prerequisites: Completion of 36 credits included in the first year of the Nursing Pathway and acceptance into an approved clinical internship program. Clear background check.

NURS 2998: Directed Study

Prerequisites: One course in NURS; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0080 or completion of MATH 0070.

Nursing Assistant/ Home Health Aide

NAHA 1100: Home Health Aide

1.00 credit (0.50 lec/0.50 lab)

This course introduces the theories and procedures that pertain to the Home Health Aide in a home-care environment. You will participate in the classroom and skill lab, focusing on the theory and skills for the Home Health Aide who seeks employment in a home-care setting. You will gain a basic foundation to be a caregiver.

Prerequisite: Clear background check.

NAHA 1819: Nursing Assistant/Home Health Aide

5.00 credits (3.00 lec/2.00 lab)

This course will introduce you to the concepts of basic human needs, the health/illness continuum, and basic nursing skills in long-term care and the home-care environment. Skills will be taught in a simulated laboratory setting utilizing demonstration and role-playing. Upon successful completion of classroom studies, you will participate in a supervised clinical experience in a long-term care facility. Your presence is mandatory at all class and clinical hours to achieve a passing grade in the course. This course meets the objectives of the Federal Omnibus Budget Reconciliation Act (OBRA) and Minnesota Department of Health Requirements as detailed for educating the nursing assistant. Upon successful completion of the course and clinical, you will be prepared for the Nursing Assistant test out and, upon successful testing, will be placed on the Minnesota Nursing Assistant Registry. Please see Program pages in this catalog for other course requirements. Must be taken pass/fail.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052. Clear background check.

NAHA 1850: Nursing Assistant/Home Health Aide Extended Hour

This extended version of the federal Nursing Assistant course provides you with added support to achieve academic and employment success. In this course, you will receive additional classroom hours and clinical practice to facilitate your mastery of Nursing Assistant theory and technical skills. The emphasis on individual learner styles and group process will assist you in preparing for the Nursing Assistant Test Out (NATO). You must attend all classroom and clinical hours. Please see Programs and Credentials pages in this catalog for other course requirements. Must be taken pass/fail.

Prerequisites: Placement into READ 0100 or completion of ESOL 0042. Clear background check.

NAHA 1900: Acute Care Skills for Nursing Assistants

3.00 credits (2.00 lec/1.00 lab)

This course builds on the knowledge, skills and procedures learned in the basic, federally-mandated Nursing Assistant curriculum and provides preparation employment in acute-care settings. You will participate in the on-campus classroom and skills lab and attend a supervised clinical experience in a hospital. Please see Programs and Credentials pages in this catalog for other course requirements. Must be taken pass/fail.

Prerequisites: Successful completion of NAHA 1819 or NAHA 1850, and current Minnesota Nursing Assistant Registration. Clear background check.

NAHA 2998: Directed Study

Prerequisites: One course in NAHA.

Philosophy

PHIL 1110: Critical Thinking

3.00 credits (3.00 lec)

This course develops skills in critical and evaluative thinking. You will learn to analyze logical relations between facts and interpretations, and to express possible underlying value assumptions governing arguments and information. You will discuss issues derived from a variety of different disciplines, including philosophy, ethics, rhetoric and communications. A variety of media will be used to introduce the issues: professional conveyances, newspaper and television reporting and editorials, and advertising. You will gather relevant factual data, evaluate the bias of data, and organize data logically into a presentation.

Fulfills MnTC Goal Area 2.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PHIL 1115: Introduction to Philosophy

3.00 credits (3.00 lec)

This course is an introduction to the works and ideas of Western and non-Western philosophers, which emphasizes how philosophical questions and their answers have been dealt with by different thinkers in different contexts. Your development of familiarity with the ideas examined, as well as critical thinking and rhetorical skills essential for functioning effectively in philosophical argument, are the basis of evaluation.

Fulfills MnTC Goal Area 6.

Prerequisite: One course from the MnTC Goal Area 1.

PHIL 1171: Ethics

3.00 credits (3.00 lec)

This course teaches you to apply a range of multicultural ethical theories: Western, African, Asian, Native American, Feminist and Ecological. You will learn to think critically about ethical questions and apply ethical theories to practical issues. You will be required to demonstrate increasing knowledge of these topics through writing and dialogue. You will be encouraged to integrate the course material with your current academic and personal interests. *Fulfills MnTC Goal Areas 6 and 9.*

Prerequisite: One course from the MnTC Goal Area 1.

PHIL 1172: Topics in Contemporary Philosophy

1.00–3.00 credits (1.00–3.00 lec)

This course examines particular sets of issues relevant to contemporary debates in philosophy, undertaking further investigation of themes left undeveloped in Introduction to Philosophy. Topics for the course change from year to year. You will study primary texts as a basis for seminar-style discussions.

Fulfills MnTC Goal Area 6.

Prerequisite: One course from the MnTC Goal Area 1.

PHIL 2110: Logic

3.00 credits (3.00 lec)

This course examines the science and the art of reasoning. You will learn to distinguish inductive from deductive forms of reasoning, evaluate formal arguments for validity and soundness, identify logical fallacies, and create effective arguments of your own.

Fulfills MnTC Goal Area 4.

Prerequisites: Placement into MATH 1110 or completion of MATH 0080 or MATH 0088.

PHIL 2115: Asian Philosophy

3.00 credits (3.00 lec)

This introductory course explores Asian philosophies, including Chinese, Indian, Buddhist, Southeast Asian and Japanese. You will cover logic, metaphysics, epistemology, philosophy and religion, mind-body dualism, freedom and determinism, and language in a topical fashion, highlighting major historical figures and movements and their interaction with the contemporary landscape of Asian philosophy. You will be required to demonstrate knowledge of these topics, skillful philosophical writing and dialogue, and a specialized understanding of one philosopher or topic of your choice.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

PHIL 2171: Environmental Ethics

3.00 credits (3.00 lec)

This course applies a range of multicultural ethical theories to contemporary issues affecting ecosystems: climate change, wilderness preservation, animal rights, food, energy, green initiatives and sustainable growth, among others. You will learn to think critically about the relationship between human beings and the environment, including the place of urban centers in the natural environment and the essence of our moral obligations to the land. You will be encouraged to think about these issues from a global perspective and to gain awareness of global and local connections.

Fulfills MnTC Goal Areas 6 and 10.

Prerequisite: ENGL 1110.

PHIL 2181: Social Ethics

3.00 credits (3.00 lec)

This course is an integration of applied ethics and service-learning. You will engage the historical, theoretical, and contemporary landscape of social issues, such as social and economical justice, global hunger and poverty, terrorism, human rights, civil liberties, drug control and addiction, abortion, sexuality and marriage, and the environment. You will think critically about these social issues while integrating your service-learning experiences with a local non-profit organization of your choice, working on one or more of these social issues. You will be required to fulfill your on-site service-learning hours (approximately 390 hours total by the end of the semester).

Fulfills MnTC Goal Area 6 and 9.

Prerequisite: ENGL 1110.

PHIL 2998: Directed Study

Prerequisite: One course from the MnTC Goal Area 1.

Phlebotomy

PHLE 1000: Phlebotomy

4.00 credits (2.00 lec/2.00 lab)

A phlebotomist is familiar with all aspects related to the blood-collection process. The focus of this course is to provide you with the comprehensive skills to be able to perform venipunctures competently and safely. Lectures include medical terminology, anatomy and physiology, blood-collection procedures, communication skills and professionalism. You will have hands-on laboratory practice sessions to learn the skills and techniques to perform the required puncture methods. You must also complete the 120-hour internship course (PHLE 1002) to be able to find employment as a phlebotomist.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; admission to the Phlebotomy Program.

Prerequisites/Corequisites: BIOL 1127, BIOL 1128; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070, HCCC 1100.

PHLE 1002: Phlebotomy Internship

3.00 credits (3.00 int)

This 120-hour internship course prepares you for employment and to become eligible for laboratory certification. Through this practicum experience, you will become familiar with all aspects related to the blood-collection process. The focus of this course is to provide you with comprehensive skills to be able to perform venipunctures competently and safely. You will have hands-on practice sessions to develop the skills and techniques required in performing various puncture methods, including a minimum of 100 successful venipunctures. This course must be completed within one term of PHLE 1000. You must pass a background check and provide proof of immunity prior to placement in the internship.

Prerequisites: PHLE 1000; BIOL 1127, BIOL 1128; HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060, HCCC 1070, HCCC 1100; clear criminal background check.

Photography

PHOT 1100: Photography 1

3.00 credits (2.00 lec/1.00 lab)

This course is designed to provide you with a basic understanding of black-and-white photography from camera controls to film development and print processing. Through demonstrations, lectures, slide/video presentations, and assigned projects, you will develop a basic vocabulary for creating, discussing, and criticizing photographs.

Fulfills MnTC Goal Area 6.

PHOT 1200: Photography 2

3.00 credits (2.00 lec/1.00 lab)

This course is designed to provide you with further technical, historical and critical support in the making of photographs. It focuses on black-and-white photography, presented as single images within a body of work. Through slides, videos and discussions, you will consider historical concerns in photography as precedents for contemporary photographic practices.

Fulfills MnTC Goal Area 6.

Prerequisites: PHOT 1100.

PHOT 2998: Directed Study

Prerequisite: One course in PHOT.

Photography and Digital Imaging

PHDI 1010: Photo Composition and Design

2.00 credits (2.00 lec)

This course is an introduction to the concepts of image composition and design as it relates to photography and image area management. You will utilize the six elements of photographic compositional technique and the seven elements of design as you explore a variety of subject matter including people, landscapes, buildings, and objects as you prepare a portfolio that will help you establish and further explore your personal vision. You will also develop an understanding of photographic aesthetics and demonstrate that knowledge during group critiques. You must provide your own digital camera, minimum of 6 mega pixels, digital SLR preferred. A digital SLR is required for all PHDI majors.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

PHDI 1030: Photo and Studio Lab 1

1.00 credit (1.00 lab)

This course is designed to give you further access to the studio areas needed to complete assigned coursework in other courses, master previously learned skills, explore new techniques or simply work on portfolio production.

Prerequisites: PHDI 1110, PHOT 1100; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

PHDI 1031: Photo and Studio Lab 2

1.00 credit (1.00 lab)

This course is designed to give you further access to the darkroom, studio areas, and equipment needed to complete assigned coursework in other courses, master previously learned skills, explore new techniques or simply work on portfolio production.

Prerequisites: PHDI 1110, PHOT 1100; Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

PHDI 1032: Photo and Studio Lab 3

1.00 credit (1.00 lab)

This course is designed to give you further access to the darkroom, studio areas, and equipment needed to complete assigned coursework in other courses, master previously learned skills, explore new techniques or simply work on portfolio production.

Prerequisites: PHDI 1110, PHOT 1100; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

PHDI 1110: Digital Photography 1

3.00 credits (2.00 lec/1.00 lab)

This course is an introduction to the digital capture process and digital workflow. The main emphasis will be on RGB color theory, digital measurement, digital input through digital cameras, flatbed and film scanners, and the output of digital image files. You must provide your own digital camera, minimum of 6 mega pixels, digital SLR preferred. A digital SLR is required for all PHDI majors.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

Corequisite: PHDI 1120.

PHDI 1120: Lighting 1

3.00 credits (2.00 lec/1.00 lab)

This course covers basic lighting techniques for both traditional silver-based and digital photography. You will learn the control of the five lighting elements of quality, direction, ratio, quantity and color as they relate to creating three-dimensional contrast. You will explore the application of natural and tungsten lighting in the studio and on location. You must provide your own digital SLR and light meter for this course.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; or instructor approval.

PHDI 1230: Lighting 2

3.00 credits (2.00 lec/1.00 lab)

This course follows up on the skills and techniques learned in Lighting 1. Major emphasis of this course is placed on the setup, operation, and utilization of studio flash photography equipment and accessories. Assignments and course content will allow you to experience studio flash both in the studio and on location. You must provide your own digital SLR camera and light meter for this course.

Prerequisites: PHDI 1010, PHDI 1110, PHDI 1120 or instructor approval.

PHDI 1240: Photo Assistant Training

2.00 credits (1.00 lec/1.00 lab)

This course is designed to help you prepare for employment opportunities as a photo assistant. You will be exposed to the expectations and demands of photo assisting through field trips, guest speakers and opportunities to assist program staff and student photographers.

Prerequisites: PHDI 1110, PHDI 1120 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

PHDI 1250: Digital Photo 2

3.00 credits (2.00 lec/1.00 lab)

This course is a continuation of the basics learned in Digital Photo 1 but with a greater emphasis on Digital SLR camera operation and image output through inkjet computers. You will capture images in the RAW file format on location and in the studio, tethered to a computer. You will use Photoshop Camera RAW and Phase One C1 Pro software. You must provide your own digital SLR camera and light meter for this course.

Prerequisites: PHDI 1010, PHDI 1110, PHDI 1120.

PHDI 1270: Medium Format Photography

2.00 credits (1.00 lec/1.00 lab)

This is a film-based course that provides you with a practical, hands-on experience in the operation and use of medium-format cameras and medium-format photography. You will use Hasselblad, Mamiya and other medium-format cameras in a variety of applications that will enable you to improve your exposure techniques and increase your personal creative vision. You must provide your own light meter for this course.

Prerequisites: PHDI 1010, PHDI 1110, PHDI 1120 or instructor approval.

PHDI 1290: Flash Photography

2.00 credits (1.00 lec/1.00 lab)

This course provides you with a working knowledge of the technical and creative aspects of on-camera flash photography and allows you to use that knowledge to further your creative options and enhance your own personal vision. You will utilize on-camera flash in manual, automatic and TTL shooting modes, while employing a variety of on-camera flash techniques such as direct, bounce, fill-flash, shutter dragging, "slash and flash," rear curtain sync, fast shutter sync, light painting, slave and multiple flash setups. You must provide your own digital SLR and light meter for this course.

Prerequisites: PHDI 1010, PHDI 1110, PHDI 1120 or instructor approval.

PHDI 2120: Product Photography

3.00 credits (2.00 lec/1.00 lab)

This studio course covers the planning, setup, execution and presentation of product photography. While utilizing digital technology, you will develop the lighting skills necessary to photograph a variety of products including glassware, fabrics, reflective objects and food. You must provide your own digital SLR and light meter for this course.

Prerequisites: PHDI 1230, PHDI 1250 or instructor approval.

PHDI 2130: Portrait Photography

3.00 credits (2.00 lec/1.00 lab)

This studio course covers the basics of professional portrait photography. You will explore the ins and outs of people photography as you develop interpersonal communication skills and photographer-to-subject rapport; learn lighting and posing techniques for individual, environmental and group portraits; and examine portrait applications in the professional marketplace and the equipment requirements needed to succeed in the portrait photography industry. Upon completing this course, you will have a portrait portfolio consisting of children, groups, couples, individual and environmental portraits. You must provide your own digital SLR and light meter for this course.

Prerequisites: PHDI 1230, PHDI 1250 or instructor approval.

PHDI 2140: Fashion Photography

2.00 credits (2.00 lec)

This course covers the creative and exciting area of fashion photography. You will develop timing and rapport with your subjects as you prepare fashion photography portfolios for yourself and for individual models. You will also explore some of the legal aspects of fashion photography such as consent, release forms and compensation. You must provide your own digital SLR and light meter for this course. You may be required to pay a lab fee for this course in order to cover professional modeling fees.

Prerequisite: PHDI 1230 or instructor approval.

* *Corequisite:* PHDI 1030.

PHDI 2150: Wedding Photography

3.00 credits (2.00 lec/1.00 lab)

This course introduces you to professional wedding photography techniques. You will learn the tools of the trade, as well as posing techniques, the various types of wedding photography, and the pricing and presentation of wedding photography. There will be a heavy emphasis on guest speakers in this course. You must provide your own digital SLR and light meter for this course.

Prerequisites: PHDI 1110, PHDI 1120, PHDI 1290 or instructor approval.

PHDI 2160: Infrared Photography

2.00 credits (2.00 lec)

This course gives you a thorough background in both the technical and aesthetic uses of infrared black-and-white and color films. You will use infrared films to produce a portfolio of images containing landscapes and architectural subjects, nature studies, portraits and fashion photographs. You must provide your own 35mm SLR, 25A red filter and light meter for this course.

Prerequisites: PHDI 1110, PHOT 1100 or instructor approval.

PHDI 2170: Large-Format Photography

4.00 credits (3.00 lec/1.00 lab)

This course offers a hands-on opportunity to learn the operation and application of the 4x5 view camera. You will learn perspective, sharpness control, magnification, and exposure compensation as you perform classroom exercises and detailed assignments. You must provide your own light meter for this course.

Prerequisites: PHDI 1110, PHDI 1120, PHOT 1100 or instructor approval.

PHDI 2190: Photojournalism

2.00 credits (2.00 lec)

This is an introductory course into the field of photojournalism. You will learn how to capture and convey a story with images and text. You will photograph news events, feature stories, briefly interview subjects and write captions as they perform assignments out in the field for the College newspaper and/or community publications. You will capture and edit images for publication using digital cameras and industry-standard software. You will be required to provide your own digital SLR camera for this course.

Prerequisites: PHDI 1110, PHDI 1120, PHDI 1230 or instructor approval.

PHDI 2210: Portfolio Development and Presentation

4.00 credits (3.00 lec/1.00 lab)

This course covers the design, production, marketing concepts and techniques of self-promotion. You will design, identify and organize portfolio components for a specific marketplace or employment opportunity. You will design and print collateral materials, including business cards, self-promo pieces, résumés, and letterhead. Your course will culminate with a student-directed and -produced group photography exhibit. You must provide your own digital SLR, light meter and print materials for this course.

Prerequisites: PHDI 2120, PHDI 2130 or instructor approval.

PHDI 2390: Advanced Production Lab 1

1.00 credit (1.00 lab)

This is an independent study course intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; current enrollment in PHDI program.

PHDI 2391: Advanced Production Lab 2

2.00 credits (2.00 lab)

This is an independent study course, intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; current enrollment in PHDI program.

PHDI 2392: Advanced Production Lab 3

3.00 credits (3.00 lab)

This is an independent study course intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; current enrollment in PHDI program.

PHDI 2430: Media Business

3.00 credits (3.00 lec)

This course covers basic business concerns. Types and elements of communication, business structures, record-keeping techniques and tax necessities, résumé essentials and interviewing techniques, budgets, bids and personal/company promotional tactics and materials are covered. You will produce personal promotional materials and perform both a simulated and actual informational interview. You will be required to design, and have printed, collateral materials including business cards, résumés and letterhead.

Prerequisites: PHDI 2120, PHDI 2130 or instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060

PHDI 2470: Internship

3.00 credits (3.00 int)

This class provides on-the-job work experience with an emphasis on management by objective, as jointly determined by the student, instructor and internship supervisor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; current enrollment in PHDI, and at least two semesters in the PHDI program.

PHDI 2490: Advanced Production

3.00 credits (3.00 lab)

This is an independent study course, intended to provide you with equipment and software access on a self-directed basis. You will be required to plan and complete a project using the media tools of choice, as determined by both you and your instructor.

Prerequisites: Instructor approval; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060; current enrollment in PHDI.

Physical Education

PHED 1100: Foundations of Fitness and Health

1.00 credit (0.50 lec/0.50 lab)

This course introduces the fundamental concepts of fitness and wellness. Through lecture, discussion, and physical fitness activities, you are introduced to the components of fitness, assessment tools, and various programs that contribute to physical and emotional health.

PHED 1101: Archery

1.00 credit (1.00 lab)

Designed for all skill levels, this course emphasizes fundamental archery skills. Archery tackle, rules, etiquette and safety in target shooting will be covered. Class will meet on campus and at a variety of outdoor archery settings. Transportation is not provided. A small fee may be charged to access certain shooting ranges. You must provide your own arrows. Must be taken pass/fail.

PHED 1103: Badminton

1.00 credit (1.00 lab)

This course introduces badminton skills. You will develop and improve your skills through participation, demonstration and discussion. The emphasis is placed on participation. Equipment is provided. Must be taken pass/fail.

PHED 1104: Water Exercise

1.00 credit (1.00 lab)

This course teaches exercises in the water to increase range-of-motion, muscle tone and cardiovascular endurance. Swimming skills are not necessary. You will exercise in a warm pool (84 degrees), and exercises are adapted for those with special needs. Class meets off campus for two hours per week. Transportation is not provided. Must be taken pass/fail.

PHED 1105: Bowling

1.00 credit (1.00 lab)

Designed for all skill levels, this course emphasizes fundamentals skills, scoring, game courtesies, handicapping, game strategy and progression to advanced skills. In-class league play is included. Class meets off campus for two hours per week. Transportation is not provided. Must be taken pass/fail.

PHED 1106: In-Line Skating

1.00 credit (1.00 lab)

Students of all abilities will develop competency in in-line skating. Instruction will begin without skates and cover activity preparation, balance, stopping, standing up, and the art of safe falling. Care and maintenance of the equipment will also be covered. You must provide your own skates and protective equipment. Must be taken pass/fail.

PHED 1108: Beginning Hatha Yoga

1.00 credit (1.00 lab)

This course is designed to develop the mind and body through the ancient discipline of yoga. Emphasis will be on Yoga stretches, balance through body postures (ASANAS), flexibility, muscle tone, and a centered focusing leading to relaxation, as well as holistic discipline. Self-control and self-awareness are required. Must be taken pass/fail.

PHED 1109: Beginning T'ai Chi

1.00 credit (1.00 lab)

T'ai Chi is a system of physical exercise based on the principles of effortless breathing, rhythmic movement, and weight equilibrium. It is also a method of self-defense. An understanding of the philosophy behind T'ai Chi is included. Must be taken pass/fail.

PHED 1110: Golf

1.00 credit (1.00 lab)

Designed for the beginning golfer, this course emphasizes fundamentals of stance, swing, use of clubs, course procedures, strategy and etiquette. You must have access to golf clubs. Transportation to golf course is not provided. Must be taken pass/fail.

PHED 1112: Tennis

1.00 credit (1.00 lab)

Designed to accommodate all skill levels, this course will emphasize the fundamental strokes found in tennis. Class will focus on forehand, backhand, volley, rules, etiquette and scoring. You must provide a tennis racquet and three tennis balls. All other equipment will be provided by the school. Must be taken pass/fail.

PHED 1113: Racquet Sports

1.00 credit (1.00 lab)

This course is an introduction to tennis, pickleball, racquetball, badminton and table tennis, with emphasis on rules, etiquette, organization, and appreciation of the fundamental footwork, strokes and strategies for each game. Must be taken pass/fail.

PHED 1114: Minnesota Winter Outdoor Activities

1.00 credit (1.00 lab)

Designed for students of all skill levels, this course will provide the opportunity to develop downhill skiing, snowboarding, or cross-country skiing and snowshoeing skills. This course covers selection and care of equipment, appropriate clothing, winter outdoor safety and the fundamental skills found in each activity. It also emphasizes participation and skill development through lecture, videos, demonstration and discussion. You may rent equipment or provide your own. Transportation is not provided. There is an additional fee charged for this course. Must be taken pass/fail.

PHED 1116: Racquetball

1.00 credit (1.00 lab)

Designed for the beginning player, this course emphasizes development of fundamental skills through participation, demonstration and discussion. Must be taken pass/fail.

PHED 1117: Mat Pilates

1.00 credits (1.00 lab)

This course acquaints you with the basic principles of Pilates: breath, focus, powerhouse and alignment. Through the precision of movement, proper form, and breath you will gain strength in and tone your powerhouse (abdominal, pelvic and back muscles). You will perform all exercises on a mat from your engaged powerhouse while using your own body weight as resistance.

PHED 1123: Weight Training

1.00 credit (1.00 lab)

This course is designed as an introduction to resistive exercise through the use of weight machines and free weights, with emphasis on total fitness through circuit training. You will identify personal needs and pursue a program appropriate to those needs. Must be taken pass/fail.

PHED 1126: Effective Bicycling

1.00 credit (1.00 lab)

This is a course for beginning and intermediate adult bicycle riders. It covers conditioning sessions, bike mechanics and maintenance, bike handling principles, emergency maneuvers, cycling physiology, techniques for cycling in traffic, and techniques for dealing with exceptional conditions of weather, lighting, grades and presence of other cyclists. You must provide your own multiple speed bicycle. Must be taken pass/fail.

PHED 1127: Hiking and Backpacking

1.00 credit (1.00 lab)

This course is designed to provide a camping experience with hiking. The on-campus sessions deal with selection, use and preparation of equipment for a trip. A camp-out with hiking will be arranged off campus, typically at a state park. Must be taken pass/fail.

PHED 1128: Recreation and Games: Developing Self and Leadership

2.00 credits (2.00 lab)

This course will heighten your sense of adventure and fun with activities intended to appeal to mind, body, and spirit. You will participate in a series of individual and group games. You will learn to take appropriate risks and sharpen your problem-solving and conflict-management skills. You will learn to build trust within yourself and with others, learn to cooperate with and support classmates, and enhance your physical fitness and self-confidence. You will apply the learning from this course to other areas of your life and participate in an end-of-the-semester experience. Must be taken A–F.

PHED 1132: Relaxation Techniques

1.00 credit (1.00 lab)

This course is designed for the student interested in developing body awareness and relaxation techniques. It includes learning techniques to reduce distress and quiet the body, stretches for relaxing, diaphragmatic breathing, progressive relaxation, massage, and various other techniques. It also emphasizes decisions and choices that need to be made for acquiring good body awareness, all done within a psychophysical education approach. Must be taken pass/fail.

PHED 1134: Fitness Walking

1.00 credit (1.00 lab)

In this course, you will be introduced to the benefits of walking, learn good walking techniques, set fitness goals and document your activities. Must be taken pass/fail.

PHED 1136: Bicycle Touring

1.00 credit (1.00 lab)

This is a course for intermediate adult bicycle riders who want to learn the techniques of bicycle camping. Topics such as equipment, conditioning, attitude, preparation, nutrition and crisis management are covered. There will be a two-day, self-contained tour covering at least 50 miles per day. You must provide your own bicycle and camping equipment. Must be taken pass/fail.

Prerequisites: PHED 1126 or instructor approval.

PHED 1138: Folk Dance

1.00 credit (1.00 lab)

This course introduces you to a variety of folk dances. Instruction will focus on many different cultures and the importance of dance as it reflects diverse heritages. Active participation is required. Must be taken pass/fail.

PHED 1154: Scuba

1.00 credit (1.00 lab)

The purpose of the scuba course is to provide the basic knowledge and skills to safely gain experience in the diving environment. Successful completion leads to PADI (Professional Association of Diving Instructors) Open Water certificate. If you want to complete PADI open water certification, two lake trips are required. Must be taken pass/fail.

PHED 1156: Aerobic Workout

1.00 credit (1.00 lab)

This course is designed for the student interested in developing cardiovascular fitness through a variety of rhythmic, low- and high-impact movements to music. Class will progress from beginning levels, emphasizing each student's individual fitness level, to a level of increased activity. Must be taken pass/fail.

PHED 1157: Step Aerobics

1.00 credit (1.00 lab)

This course emphasizes cardiovascular and muscle conditioning through the use of the bench step, hand weights and exercise bands. Fitness assessment is included in this course. Must be taken pass/fail.

PHED 1164: Volleyball

1.00 credit (1.00 lab)

This course teaches the fundamentals of volleyball with emphasis on participation, basic skills, rules, strategy, teamwork and tournament play. Must be taken pass/fail.

PHED 1166: Soccer

1.00 credit (1.00 lab)

Designed for all skill levels, this course emphasizes fundamental skills with an emphasis on participation rules, game strategy and teamwork. Must be taken pass/fail.

PHED 1170–1175: Physical Education Topics

1.00 credit (1.00 lab)

This course will focus on skill development in activities that reflect current trends in the physical education field—for example, recreational activities, sports activities, sports officiating or adventure exploration. Must be taken A–F.

PHED 1176–1179: Physical Education Topics

1.00 credit (1.00 lec)

This course will examine timely topics in the physical education field. These topics will be pertinent to current trends in recreational activities, sports activities, sports officiating adventure exploration, special event planning and will use child-development approaches to activities. Must be taken A–F.

PHED 1180: Fitness Intensity Training

1.00 credit (1.00 lab)

This course is for students who wish to achieve an upper level of physical conditioning. The course includes strength training, flexibility, aerobic/endurance activities and assessment of physical fitness. Must be taken pass/fail.

PHED 1190: Self-Defense for Women

1.00 credit (1.00 lab)

This course helps you develop physical and psychological skills to avoid or stop physical assault, harassment, and dangerous situations. Class sessions will include practicing physical techniques of basic striking and kicking, shifting, blocking, and releasing. Some time will also be spent learning to analyze dangerous situations, victim behavior, the mentality of attackers, and issues of domestic violence and sexual harassment/violence. Must be taken pass/fail.

PHED 1199: Supervised Activity Programs

1.00 credit (1.00 lab)

This course is designed to allow you to register for credit for an instructional program or individual fitness program that you design. An activity contract must be completed and approved by the instructor during the first week of the semester. Must be taken pass/fail.

PHED 2100: Outdoor Activities and Leadership

2.00 credits (1.00 lec/1.00 lab)

This course introduces activities in natural settings, which illustrate the importance of natural settings as a necessary component to a healthy and balanced life. You will learn more about yourself, and you will learn how to build safe and welcoming environments for others. In addition to participating in classroom settings, you will go on one weekend trip, where you can stay in a cabin or a tent. Must be taken A–F.

PHED 2200: Coaching Basketball

2.00 credits (2.00 lec)

This course will examine principles, philosophies, systems and styles involved in coaching basketball. You will learn offensive and defensive theory and strategy, rules study, fundamental techniques and administrative/organizational aspects of coaching basketball.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052 or instructor approval.

PHED 2207: Intercollegiate Golf (Co-ed)

1.00 credit (1.00 lab)

This activity is designed for students who participate in intercollegiate golf. All students need coach/athletic director permission to enroll. This course is graded A–F.

This course does not fulfill the PE requirement for the A.A. degree.

PHED 2208 Advanced Hatha Yoga

2.00 credits (1.00 lec/1.00 lab)

This course is designed for students who want to deepen their yoga practice. In addition to performing advanced asanas, such as inversions and arm balances, you will also broaden your knowledge of the yoga way of life. You will explore such topics as the Asthanga pathway, ayurveda, chakras, Sanskrit and proper sequencing for home practice. Must be taken pass/fail.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; PHED 1108 or permission of instructor.

PHED 2998: Directed Study

Prerequisites: One course in PHED.

Physics

PHYS 1100: Introduction to Physics

4.00 credits (3.00 lec/1.00 lab)

This course is an introduction to the basic principles of physics and how these principles explain everyday phenomena. The course is intended for liberal arts students and students interested in taking a basic science course before enrolling in advanced science courses. The lecture/theory portion of this course is offered both on campus in the classroom and as a Web course. This course includes two hours of required lab per week, which must be taken on campus.

Fulfills MnTC Goal Area 3.

Prerequisites: Placement into MATH 0080 or completion of MATH 0070.

PHYS 1131: College Physics 1

5.00 credits (4.00 lec/1.00 lab)

This course is the first of a two-semester course sequence and is an algebra- and trigonometry-based course designed to familiarize you with the physical phenomena underlying both the natural universe and human technology. Subjects include mechanics, heat and thermodynamics, wave phenomena, sound, physical and geometrical optics, electricity, magnetism, and postclassical physics. Many science-related programs, such as pharmacy, architecture and physical therapy, require a physics course of this type. This course also satisfies the physics requirement for some premed curricula. This course includes two hours of laboratory instruction per week.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 3.

Prerequisites: Two years high school algebra and high school trigonometry OR MATH 1110 and MATH 1120 or MATH 1125.

PHYS 1132: College Physics 2

5.00 credits (4.00 lec/1.00 lab)

This course is the first of a two-semester course sequence and is an algebra- and trigonometry-based course designed to familiarize you with the physical phenomena underlying both the natural universe and human technology. Subjects include mechanics, heat and thermodynamics, wave phenomena, sound, physical and geometrical optics, electricity, magnetism, and postclassical physics. Many science-related programs, such as pharmacy, architecture and physical therapy, require a physics course of this type. This course also satisfies the physics requirement for some premed curricula. This courses must be taken in sequence unless permission of the instructor is obtained. This course includes two hours of laboratory instruction per week.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 3.

Prerequisite: PHYS 1131.

PHYS 1211: Physics for Science and Engineering 1

6.00 credits (5.00 lec/1.00 lab)

Topics include mechanics and thermodynamics. This course satisfies the physics requirement for engineering, premed, and chemistry majors. You must register for a lab section, which is an integral part of this course.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 3.

Prerequisites: High school physics or PHYS 1100 with a grade of A or PHYS 1131.

Prerequisite/Corequisite: MATH 1180.

PHYS 1221: Physics for Science and Engineering 2

6.00 credits (5.00 lec/1.00 lab)

Topics include waves and electricity and magnetism, as well as optics if time permits. This course satisfies the physics requirement for engineering, premed and chemistry majors. You must register for a lab section, which is an integral part of this course.

This course is also appropriate for liberal arts students seeking general education credits.

Fulfills MnTC Goal Area 3.

Prerequisite: PHYS 1211.

Prerequisite/Corequisite: MATH 1190.

PHYS 2998: Directed Study

Prerequisite: One course in PHYS.

Political Science

PSCI 1101: American Government and Politics

3.00 credits (3.00 lec)

This course provides an introduction to American government and politics. It includes the study of the constitutional foundations of the American political system by examining the Constitution, the politics of federalism, and our tradition of civil liberties and civil rights; the study of political processes, participation, and power by examining interest groups, political parties, campaigns, and elections; the study of the institutions of the American government by examining the Congressional, Executive and Judicial branches; and policy and policy formation in American government.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1102: State and Local Government

3.00 credits (3.00 lec)

This course traces the development of local political systems in the United States with special emphasis on state Legislatures and city and county governments.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1103: Comparative Government

3.00 credits (3.00 lec)

This course examines and compares the governments of various countries of the world. Countries studied are chosen to illustrate different types of governments, as well as to show the diversity of governmental systems in the world. Examples are taken from the industrial democracies and the emerging democracies, from former communist countries and existing communist countries, from authoritarian regimes and democratic regimes, from the developed world and the developing world.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1104: World Politics

3.00 credits (3.00 lec)

This introductory course helps you develop a better understanding of the major issues and conflicts that challenge our present global order. The course will cover the following main topics: the politics of intervention; cooperation and conflict in global institutions; south-north relations and the politics of hunger, development, foreign aid, and trade; politics of human rights and the environment; politics of the arms race; and case studies in the politics of international conflicts. The selection will depend on world events as they occur during the semester.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1110: Introduction to Political Science

3.00 credits (3.00 lec)

This course deals with a number of topics that are part of the academic discipline of political science, including political theory, political ideologies, government, political culture, politics of diversity, politics of media, politics of change, political economy, international politics, and comparative government. The course draws its context and contents, its examples and its processes, from a global reality as much as possible, giving the course a special emphasis on the topics of comparative government and international politics. The course also requires you to examine your own political experience, political ideas, political culture, and political socialization in the context of considerations of alternative diverse opinions, interests, and ethical views.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1111: Reclaiming Democracy: An Introduction to Civic Engagement

1.00 credits (1.00 lec)

This course teaches you about the individual and societal benefits of civic engagement theory and practices and the practical challenges of motivating mass citizen engagement. You will participate in civic engagement projects (or public projects) on campus and within the broader community; explore how to contribute to ethical and democratic governance, foster civil society, build social capital, and advance sustainable communities; and learn how to connect your own political experiences to research on civic engagement theory, history and practice.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1137: Environment, Politics and Society

3.00 credits (3.00 lec)

This course provides an examination of the global environmental challenges confronting the world today and the range of solutions that have been proposed to solve these problems. Scientific, technological, social, economic and political dimensions are integrated into the problem-solving, critical thinking and social-change strategizing that is at the core of this course. Case studies include local, national and international examples of both problems and actions people are taking to “save” the planet.

Fulfills MnTC Goal Areas 5 and 10.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1140: Introduction to Latin America

3.00 credits (3.00 lec)

The purpose of this course is to provide an introductory and interdisciplinary overview of the contemporary problems and achievements of Latin American countries and peoples. You will examine the contemporary history, politics, culture, economy and social structure of the region using the concepts of internal and external conflict, innovation and transformation. Key issues and events include colonial legacies; dilemmas of economic and political development; migration and urbanization; race, ethnicity and gender; religion and cultural identity; relations with the U.S.; and the region’s role in the world today.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1143: Introduction to the Middle East

1.00 credit (1.00 lec)

This course provides an introduction to the region of the Middle East and key conflicts and challenges within it. You will become more familiar with the countries and cultures of the region as we examine the different forces that unite and divide the peoples who live there. Special focus will be given to the politics of oil, post-9/11 wars and conflicts (especially Iraq), the role of Islam and the Israeli-Palestinian conflict. You will also examine different perspectives on the role of U.S. policy, and learn about organizations and resources to continue your education on Middle East issues. (Note: Any major crisis in the region that may exist at the time of each course offering will be integrated into our study.)

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1147: Introduction to China, Japan and the Asian Pacific Rim

1.00 credit (1.00 lec)

This course provides an introduction to the Asian Pacific Rim region in general and especially to the countries of China and Japan. You will become more familiar with the countries and cultures of the region and examine the different forces that unite and divide the people who live there. You will learn about the major internal and external factors that are driving the changes, challenges and conflicts that each country faces. (Note: Any major crisis in the region that may exist at the time of each course offering will be integrated into our study.)

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1149 Introduction to Mexico

1.00 credit (1.00 lec)

This course provides an introduction to the country of Mexico including its relationship with the United States and regional neighbors in Latin America and the Caribbean. In order to better understand contemporary Mexico, you will explore geographic and key historical as well as current internal and external political, economic, social and cultural forces that drive change and spur conflict in this country today. Key topics include migration and immigration, the role of the NAFTA and other trade treaties and the impact of the Zapatista resistance movement. You will also become familiar with the Resource Center of the Americas and other Mexico-related organizations and resources.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 1169: Introduction to Human Rights

1.00 credits (1.00 lec)

This course provides an introduction to the concept of human rights and how they have evolved, the tools that exist to pursue them and the kind of work that is being done to define and promote them in the United States and globally. In this class, you will meet human rights activists from a number of fields and become familiar with organizations and resources for continuing your education on human rights issues.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 2000: Constitutional Law

3.00 credits (3.00 lec)

This course is an overview of the origins of the U.S. Constitution and its continuing evolution through amendment and interpretation. Changing power relationships within government and changing definitions of the basic rights of citizens will be examined through the study of important case decisions, both historic and contemporary, with an eye to demonstrating the fluid nature of our Constitutional system. Emphasis will be placed on the practical impact of the Constitution and of Supreme Court decisions upon the enforcement of criminal laws.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

PSCI 2998: Directed Study

Prerequisite: One course in PSCI.

Polysomnographic Technology

PSOM 1000: Introduction to Sleep and Rest

3.00 credits (3.00 lec)

This course introduces you to the basic human need of sleep and rest. You will learn about the importance of sleep and rest for a healthy life, sleep cycles, the history of sleep and common sleep disorders; and be introduced to the field of sleep science and its relevance to other health professions. This course is open to the public as a health elective and is also a required course in the Polysomnographic Technology A.A.S. program.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PSOM 1100: Fundamentals of Polysomnography

3.00 credits (2.00 lec/1.00 lab)

This course examines the scope of practice of a Polysomnographic Technologist and the vocational role within a team of sleep medicine professionals. You will learn about the practical and ethical considerations in providing service to patients with a focus on therapeutic communication, documentation and safety in the sleep laboratory. During laboratory time you will start learning to analyze sleep studies. Specific topics include sleep staging, recognition of abnormal sleep-related breathing patterns, and technical reporting. The course also requires touring an accredited sleep center and spending a nightshift observing the work of a Registered Polysomnographic Technologist (RPSGT).

Prerequisites: Admission to the Polysomnography Program; PSOM 1000 OR HLTH 1000

PSOM 1200: Anatomy and Physiology of Sleep and Breathing

2.00 credits (2.00 lec)

In this course, you will learn neurological and respiratory structure and function as it relates to sleep across the lifespan. Topics include circadian sleep/wake rhythms and the bioelectrical signals generated within the body. An introduction to normal human sleep staging is also included. Course meets the first eight weeks of the term.

Prerequisites: Admission to the Polysomnographic Technology program, BIOL 2224 OR BIOL 1127/1128.

Corequisite: PSOM 1100.

PSOM 1300: Pathophysiology and Classification of Sleep Disorders

2.00 credits (2.00 lec)

In this course, you will explore the pathophysiology of sleep disorders across the lifespan. Topics take in the major categories of sleep disorders described the International Classification of Sleep Disorders and an introduction to common therapies, including positive airway pressure (PAP), supplemental oxygen, as well as pharmaceutical and surgical treatments. Emphasis will be placed on the effects of pathology and treatment on the polysomnographic recording. Course meets the second eight weeks of the term.

Prerequisites: Admission to the Polysomnographic Technology program, BIOL 2224 OR BIOL 1127/1128.

Corequisites: PSOM 1100 and PSOM 1200.

PSOM 1400: Instrumentation in Polysomnography

5.00 credits (3.00 lec/2.00 lab)

In this course, you will learn the principles of electricity necessary for polysomnography, with emphasis on signal amplification and filtration, characteristics of waveforms, and recognition of artifacts. The laboratory focuses on the preparation of recording equipment and the patient for polysomnography, including calibrations, the use of ancillary equipment and the application of electrodes and other monitors. Course meets the first eight weeks of the term.

Prerequisites: PSOM 1100, PSOM 1200, PSOM 1300.

PSOM 1500: Monitoring and Introduction to Therapeutic Interventions

4.00 credits (2.00 lec/2.00 lab)

In this course, you will learn the principles of monitoring and therapeutic interventions in Polysomnography. Theory concepts will be reinforced in the lab setting. Topics include the production of high-quality recordings and the principles of PAP titration and oxygen therapy. You will also learn to respond to recording artifacts and complications of PAP and oxygen therapies.

Prerequisites: PSOM 1100, PSOM 1200 and PSOM 1300.

Prerequisite/Corequisite: PSOM 1400.

PSOM 1650: Internship I

2.00 credits (2.00 int)

In this introductory internship you will prepare patients for Polysomnographic monitoring and therapeutic interventions in the setting of an accredited clinical sleep laboratory. You will practice patient care, education and safety, and you will prepare and initiate routine sleep studies in patients of all ages.

Prerequisite: PSOM 1660. Clear background check.

Prerequisite/Corequisite: PSOM 1400, PSOM 1500.

PSOM 1660: Internship I Seminar

1.0 credit (1.00 lec)

This seminar meets concurrently with Internship I. Its purpose is to extend and validate the learning you gain at a partnering accredited sleep laboratory. You will discuss and reflect on internship experiences, report case studies, assess your progress, and participate in group discussions.

Prerequisite: PSOM 1650. *Prerequisite/Corequisite:* PSOM 1400, PSOM 1500.

PSOM 2000: Polysomnographic Theory Integration

4.00 credits (2.00 lec/2.00 lab)

This course requires synthesis of all previously learned sleep technology theory in preparation for taking the national registration exam upon graduation. You will review all of the fundamental knowledge and skills of a Sleep Technologist and advanced topics including mechanical ventilation, cardiac dysrhythmias, EEG effects, and pediatric sleep disorders. You will gain increasing expertise in the assessment of clinical sleep studies. Through individual appointments at accredited sleep centers you will observe and interact with physicians and other specialists as they assess and treat patients with sleep disorders. Must be taken A-F.

Prerequisites: PSOM 1400, PSOM 1500, PSOM 1650, PSOM 1660.

PSOM 2150: Internship II

3.00 credits (3.00 int)

In this course you will prepare the patient for Polysomnographic monitoring and therapeutic interventions in the clinical sleep laboratory setting and work with the patient throughout the night, applying therapeutic treatments as ordered by a physician. You will practice patient care and safety, and you will prepare and initiate routine polysomnographic testing. You will conduct therapeutic interventions in patients of all ages, and educate patients. Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660. Clear background check.

Corequisite: PSOM 2160. *Prerequisite/Corequisite:* PSOM 2000.

PSOM 2160: Internship II seminar

1.0 credit (1.00 lec)

This seminar meets in conjunction with Internship II. Its purpose is to extend and validate the learning you gain at a partnering accredited sleep laboratory. You will discuss and reflect on your internship experiences, report case studies, assess your progress, and participate in group discussions. Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660.

Corequisite: PSOM 2150. *Prerequisite/Corequisite:* PSOM 2000.

PSOM 2250: Internship III

4.00 credits (4.00 int)

This internship develops skills such as problem solving and critical thinking in the sleep laboratory. The emphasis is on production of high quality records, titration of PAP and oxygen therapy, and the accurate and timely scoring and reporting of polysomnographic data. You will also measure daytime sleepiness and cover other daytime skills. Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660. Clear background check.

Corequisite: PSOM 2260. *Prerequisites/Corequisites:* PSOM 2000, PSOM 2150, PSOM 2160.

PSOM 2260 Internship III Seminar

1.0 credits (1.00 lec)

This seminar meets concurrently with Internship III. Its purpose is to extend and validate the learning you gain at a partnering accredited sleep laboratory. You will discuss and reflect on your internship experiences, report case studies, assess your progress, and participate in group discussions. Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660.

Corequisite: PSOM 2250.

Prerequisites/Corequisites: PSOM 2000, PSOM 2150, PSOM 2160.

PSOM 2350: Internship IV

2.00 credits (2.00 int)

This capstone internship allows you to choose a sleep laboratory in which to further demonstrate and develop your skills in Polysomnographic Technology. Through arrangement with the instructor and a participating clinical site, you will have the opportunity to experience working in the sleep laboratory of your choice. You will be encouraged to complete this internship in a place where you are interested in working or developing specialized skills. If you already have a job as a Sleep Technologist, you can receive internship credit for your on-the-job training and experience (assuming cooperation from the employer). Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660. *Clear background check.*
Corequisite: PSOM 2360.

Prerequisites/Corequisites: PSOM 2000, PSOM 2150, PSOM 2160, PSOM 2250, PSOM 2260.

PSOM 2360: Internship IV Seminar

1.0 credits (1.00 lect)

This seminar meets concurrently with Internship IV. Its purpose is to extend and validate the learning you gain at a partnering accredited sleep laboratory. You will discuss and reflect on your internship experiences, report case studies, and assess your progress. Additionally, you will prepare a professional resume and practice for the registration exam. Must be taken pass/fail.

Prerequisites: PSOM 1650, PSOM 1660.

Corequisite: PSOM 2350.

Prerequisites/Corequisites: PSOM 2000, PSOM 2150, PSOM 2160, PSOM 2250, PSOM 2260.

Psychology

PSYC 1100: Applying Psychology

3.00 credits (3.00 lec)

The course examines how psychological concepts can be applied to everyday life. A variety of topics focusing on personal adjustment are included, such as the effects of stress, memory formation, interpersonal relationships and strategies for changing behavior. The course is designed for students who are not planning to take General Psychology. *Fulfills MnTC Goal Area 5.*

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PSYC 1110: General Psychology

4.00 credits (4.00 lec)

This course is an introduction to the scientific study of behavior and mental processes. A variety of topics such as the brain, memory, learning, social influence, motivation, emotion, personality, mental disorders and therapy are discussed.

Fulfills MnTC Goal Area 5.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PSYC 2215: Child and Adolescent Psychology

3.00 credits (3.00 lec)

This course examines how and why people change from the prenatal period through adolescence. While the focus is on typical developmental changes in the cognitive, physical, personality and social-emotional areas, disorders and problems salient to each age are discussed.

Fulfills MnTC Goal Area 5.

Prerequisite: PSYC 1110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PSYC 2240: Lifespan Development

4.00 credits (4.00 lec)

The course provides a comprehensive view of human development from conception to death. Important aspects of development changes, (biological, cognitive and psychosocial) are examined, as well as problems and issues salient to various developmental stages.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisite: PSYC 1110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.*

**These prerequisites are only for non-Nursing program students. Nursing students should work with Nursing program admissions to determine if prerequisites are met.*

PSYC 2250: Abnormal Psychology

3.00 credits (3.00 lec)

Abnormal Psychology expands on the brief sample of psychological disorders studied in General Psychology. This course reviews the personality theories underlying the multiple explanations of psychological disorders and examines the symptoms, etiology and treatment of disorders (e.g. schizophrenia, mood disorders and autism). Assessment and diagnostic procedures and issues are discussed, as well as social, ethical, cultural and legal issues that intersect with the mental health field, especially in regard to the treatment of mental illness.

Fulfills MnTC Goal Area 5.

Prerequisite: PSYC 1110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

PSYC 2260: Social Psychology

3.00 credits (3.00 lec)

Social psychology is the scientific study of how people think about, influence and relate to one another. The four basic themes are: 1) Social thinking: How we view ourselves and others and how we assess the accuracy of our impressions, intuitions and explanations; 2) Social influence: Examining the nature of conformity, persuasion and group influence so we can better recognize their influence upon us; 3) Social relations: Examining positive and negative attitudes and behavior in areas such as attraction, altruism, aggression, violence and peacemaking; and 4) Application of psychological principles to law, business and health.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisite: PSYC 1110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; *placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.*

PSYC 2275: Positive Psychology: The Study of Happiness and Well-Being

3.00 credits (3.00 lec)

Positive psychology will introduce you to theoretical concepts and scientific research regarding human strengths and virtues. You will examine human behavior that contributes to psychological well-being through topics such as happiness, hope, flow, meaning, optimism, and resiliency. Your investigation will focus on scientific assessments of these and related behaviors, their causes, correlates and interventions that have been shown to promote them. To solidify your learning you will be asked to apply positive psychological principles through a variety of experiential learning tasks and share your insights. Must be taken A-F

Fulfills MnTC Goal Area 5.

Prerequisite/Corequisite: PSYC 1110.

PSYC 2285: Topics of Psychology

1.00–4.00 credits (1.00–4.00 lec)

This course will review research and principles in specific content areas. The various topics are chosen for timeliness, student interest and applied value.

Fulfills MnTC Goal Area 5.

Prerequisite: PSYC 1110, placement into READ 1300 or completion of READ 0200 or ESOL 0052; *placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.*

PSYC 2998: Directed Study

Prerequisite: One course in psychology.

Reading

READ 0100: Reading 1

5.00 credits (5.00 lec)

In this course, you will learn the academic and lifelong reading strategies needed for success in technical programs and many associate of arts majors. You will learn how to master technical and academic vocabulary; learn how to understand and remember more of what you read; and learn how to follow complex directions and use reference manuals. This class includes a computer lab.

Must be taken pass/no credit.

Prerequisites: Placement into READ 0100 or completion of ESOL 0042 and teacher recommendation into READ 0100.

Prerequisites/Corequisites: ESOL 0043 or exemption.

READ 0200: Reading 2

3.00 credits (3.00 lec)

This course is intended for students who have adequate skills for popular reading but lack the reading skills needed for success in sophisticated technical programs or in liberal arts courses. The course teaches you strategies for maintaining concentration on long textbook assignments and maintaining comprehension when reading challenging texts and manuals that contain complex information and unfamiliar vocabulary. It also teaches you how to remember what you're read and to demonstrate knowledge adequately on assignments, projects and tests. Must be taken pass/no credit.

Prerequisites: Placement into READ 0200 or completion of READ 0100 or ESOL 0042 with faculty recommendation into READ 0200.

Prerequisites/Corequisites: Placement into ESOL 0043 or exemption.

READ 1300: College Textbook Reading

3.00 credits (3.00 lec)

This course focuses on applying college-level reading skills to the specialized context of reading occupational, academic and technical textbooks and supplementary materials. You will learn self-assessment techniques to monitor your comprehension, analyze the text structure of various disciplines and programs, learn strategies for reading different kinds of text, and apply various strategies for developing and expanding your vocabulary.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052 and ESOL 0043 or exemption and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

READ 2200: Topics in Advanced Critical Reading

3.00 credits (3.00 lec)

This topics course develops critical skills through a program of intensive, advanced college reading, which focuses upon current social, political, scientific, ethical issues or current events. The readings explore the topic from a variety of viewpoints and disciplines. You will explore both the course topic and processes/procedures of reading critically.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

Restaurant Management

REST 1000: Restaurant Business Management

3.00 credits (3.00 lec)

This foundational course examines the hospitality industry's foodservice segment. You will gain an understanding of this challenging field: It's history, career opportunities, variety of operations, production methods, business planning, and financial management skills needed to be successful.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052 and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

REST 1100: Food, Beverage and Labor Cost Controls

3.00 credits (3.00 lec)

This course examines the principles of cost controls and their application to food and beverage operations. You will learn about the diverse elements of sales within a food and beverage establishment and about cost controls needed to maintain a profitable operation. Topics include costs and sales relationships, forecasting sales, preparing budgets, cost controls systems, controlling inventory, and computer equipment and software.

Prerequisites: Placement into READ 1300 or completion of READ 2000 or ESOL 0052 and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051, and placement into MATH 0080 or completion of MATH 0070 or MATH 0077.

REST 2000: Hospitality Marketing Management

3.00 credits (3.00 lec)

This course provides the basic knowledge and practical experience needed for developing strategic and operating marketing plans for hospitality businesses. It stresses marketing orientation as a management philosophy that guides the design and delivery of guest services.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052 and placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

REST 2100: Restaurant Management Capstone

2.00 credits (2.00 lec)

This course covers operational situations and management cases from the major areas of the hospitality curriculum. You will focus on problem-solving, critical thinking, effective communication, ethical reasoning, quantitative analysis, and the use of technology.

Prerequisite: CULA 1109.

REST 2200: Restaurant Management Internship

4.00 credits (4.00 int)

This course provides an opportunity to complete a relevant internship in a specialized area of the restaurant industry. You will meet both your own learning needs as well as the needs of the hospitality operation offering the management internship. You will complete 160 hours of internship work.

Prerequisite: CULA 1109.

Sociology

SOCI 1105: Introduction to Sociology

3.00 credits (3.00 lec)

This course covers an introduction to the sociological method and perspective. The course will give you a grasp of how social scientific inquiry is conducted; how to use sociological theory and concepts; and the importance of a global perspective in understanding people, their problems, and their potentials.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 1106: Sociology of Deviance

3.00 credits (3.00 lec)

This course uses a sociological perspective to examine the processes of rule-making and rule-breaking. It includes a survey of theories explaining deviance, and the application of these theories to a number of issues often defined as deviance: Crime, juvenile delinquency and gangs, mental illness, and life-style variation, among others.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 1110: Families in Contemporary Society

3.00 credits (3.00 lec)

This course is an exploration of the complexity of the family, intimacy and sexuality in a changing America. The course explores how families can provide support and strength for individuals; you will also investigate societal threats to family cohesion and strength.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 1160: Technology, Culture and Society

3.00 credits (3.00 lec)

The use of technology is a basic feature of all human societies—our technologies influence our relations with each other and with the natural environment. Equally important, technology itself is a product of economic, political and cultural patterns. The study of technology will tell us about the kind of society we make for ourselves.

Fulfills MnTC Goal Areas 5 and 10.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 1170: Women in a Global Perspective

3.00 credits (3.00 lec)

Around the world, women are engaged in struggles to address issues of survival, identity, and social change in order to make a better world for themselves, their families, and their communities. These efforts, in turn, have influenced the emergence of an international women's movement and a new conception of human rights and global action. This course examines the development and intersection of these local and international women's movements through case studies from selected countries in Africa, Asia, the Middle East and Latin America. You will examine issues of status, diversity and cross-cultural understanding as you explore the different types of problems and challenges women face in other parts of the world and the different kinds of strategies they are creating to make change.

Fulfills MnTC Goal Areas 5 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 2115: Family Violence

3.00 credits (3.00 lec)

What factors contribute to family violence? Can they be identified and changed so that future violence can be prevented? This course surveys the major patterns of child abuse, violence in relationships, elder abuse and other forms of family crisis.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: One course in SOCI, PSYC, or HSER; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 2145: American Minority Relations

3.00 credits (3.00 lec)

This course examines the idea of "minority group" in the historical and present context of American society. Along with equality, freedom, and justice, discrimination, inequality, and racism are among our oldest values. This course seeks to confront this contradiction openly and honestly.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 2150: Sociology of Aging

2.00 credits (2.00 lec)

This course explores the social forces which affect older people and examines the sociological processes of aging from a life cycle approach. Major areas covered include myths and stereotypes, employment and retirement, older families, psychosocial theories of aging, successful aging, social issues and community resources for older persons.

Fulfills MnTC Goal Area 5.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 2155: Introduction to Criminal Justice

3.00 credits (3.00 lec)

This course is intended to give an overview of the American criminal justice system, with specific review of the roles and responsibilities of the police, courts, corrections institutions and the democratic foundations upon which the system is based. In addition, the course is appropriate for those who want to learn more about career options in the areas of criminal justice.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052.

SOCI 2998: Directed Study

Prerequisite: One course in SOCI.

Sound Arts

SNDA 1310: Sound Arts 1: The Nature and Control of Sound

3.00 credits (3.00 lec)

This course introduces you to sound: its fundamental nature; the manner in which it is controlled in air, as well as in the worlds of electronics and computers; and ways in which it can be formed to create art. Along with the exploration of theory and concepts related to sound control, you will complete individual exercises in the sound labs, culminating in the creation, recording and final mixdown of an original artwork.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

SNDA 1320: Sound Arts 2: Advanced Recording and Sync

3.00 credits (2.00 lec/1.00 lab)

This course extends your theoretical base in sound with exploration of advanced topics in analog signal flow, gain-staging and processing, as well as the foundations of nonlinear digital recording, sampling, synthesis, editing, and time coding. Theory moves to practical lab experience in live multitrack recording and mixing. You will do individual and group recording projects in MCTC sound studios involving music, dialogue and effects; work with commercial production music; and tie sound projects to video or film.

Prerequisite: SNDA 1310.

SNDA 1360: Sound Arts History and Literature

3.00 credits (3.00 lec)

In this course, you will explore the relationship between technology and the sound arts by listening to, reading about, and discussing important music recordings, film soundtracks, and videos from the body of works created in these media. Using an historical perspective, a study will be made of the electronic and computer music produced in institutional and private studios through the past century, the landmark pop and rock recordings, the development of film music and sound design and the effect of technology on live performance.

Prerequisites: SNDA 1310 and MUSC 1150.

SNDA 2330: Sound Arts 3: Advanced Digital Sound and Music

4.00 credits (3.00 lec/1.00 lab)

This is an advanced course focusing on the operation of the digital desktop studio as a tool for practical application of the theories and concepts learned up to this point in the Sound Arts program. Recording and conversion will be reviewed prior to the exploration of advanced techniques in synthesis, sampling, editing, signal processing and mixing, both within the nonlinear environment and in the larger digital studio. Data transfer in several formats will be considered. You will become familiar with a variety of hardware and software and will complete a final project in a chosen area.

Prerequisite: SNDA 1320.

Corequisite: SNDA 2340.

SNDA 2340: Sound Arts 4: Form and Design

3.00 credits (3.00 lec)

This is an advanced course focusing on the use of high-technology studios in the composition and production of a set of art works in sound design and music. Principles of form and design studied in previous courses will be amplified and made specific in several projects. You will experience the creative process from start to finish, lay the groundwork for the final, larger project to come and provide a portfolio of finished works for the benefit of potential employers or clients.

Prerequisites: SNDA 1320 and MUSC 1160.

Corequisite: SNDA 2330.

SNDA 2350: Sound Arts 5: Final Project

3.00 credits (2.00 lec/1.00 lab)

You will complete a major final project in sound, based upon the concepts, theories and practical experience absorbed during the course of your degree program in Sound Arts. You will demonstrate technical competence by composing or designing, recording or generating, processing and mixing down to final master, a work in music or sound design grown from a personal vision. Discoveries, problems, new techniques and other experiences will be shared in a class-seminar atmosphere.

Prerequisites: SNDA 2330 and SNDA 2340.

SNDA 2370: Project Studio Design

3.00 credits (3.00 lec)

In this course, you will learn how to design a personal, individualized studio for professional work in music or sound design as studied in the Sound Arts program. Topics include relating room design to the end-product envisioned, cost planning, acoustic treatment and control, AC and electronic interface design and ergonomics. After completing the course, you will have an actual design plan for your specific real or envisioned studio space.

Prerequisite: SNDA 1320.

SNDA 2380: Internship

3.00 credits (3.00 int)

The internship provides second-year Sound Arts students with an opportunity to work in the industry. Internship placement will reflect your personal direction in Sound Arts. The internship is available only to degree students. You are required to notify the internship coordinator in advance of placement and registration.

Prerequisites: SNDA 1310 and SNDA 1320.

SNDA 2390: Sound Arts as Business

3.00 credits (3.00 lec)

This course examines the prospect of developing, creating and delivering music and sound art for financial gain, as an independent artist or technician. You will learn to match industry needs to your particular talents and interests, develop a business plan for reaching your goals, perform basic bookkeeping and tax procedures, market your business, and protect and profit from your art through copyright and other means. You will leave this course with a better understanding of the business side of the music and sound industry and with practical techniques necessary for working in the area.

Prerequisite: Acceptance into the Sound Arts program.

SNDA 2998: Directed Study

Prerequisites: One course in SNDA; placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051; placement into MATH 0070 or completion of MATH 0060; demonstration of computer literacy skills.

Spanish

SPAN 1000: Beginning Spanish 1

5.00 credits (5.00 lec)

This course provides an introduction to the language and cultures of Spain and Latin America. This course parallels beginning Spanish courses offered at other liberal arts institutions. You will develop basic listening, speaking, reading and writing skills necessary to communicate about self, family and daily life, as well as basic survival needs. You will also explore cultural aspects of the Spanish-speaking world.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPAN 1100: Beginning Spanish 2

5.00 credits (5.00 lec)

This course is a continuation of SPAN 1000 and is also appropriate for the students who have completed one semester of Spanish at another liberal arts institution or have taken two years of high school Spanish. You will learn the use of past tense structures and pronoun usage. You will continue to develop listening, speaking, reading, and writing skills necessary to communicate about self, family, and daily life, as well as on abstract concepts such as feelings and emotions. You will also explore cultural aspects of the Spanish-speaking world. This course will prepare you for intermediate-level Spanish courses.

Fulfills MnTC Goal Area 8.

Prerequisites: SPAN 1000 or equivalent; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPAN 1145: Hispanic Culture and Civilization

3.00 credits (3.00 lec)

Taught in English, this course covers aspects of the cultures and civilization of Spanish-speaking peoples. You will understand the meaning of culture and cultural heritage, develop a sense of shared humanity, and begin to distinguish between stereotypical and informed viewpoints. You will gain an awareness of the historical, political, geographical, linguistic, artistic, and religious influences and contributions of Spanish-speaking cultures in Spain, Latin America and the U.S.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

SPAN 1300: Heritage/Intensive Spanish 1

5.00 credits (5.00 lec)

This course is for heritage speakers and those who have had previous exposure to the language, but who desire more formal instruction at an accelerated pace. You will build upon the language skills you already possess, focusing on the development of academic Spanish through reading and writing, as well as instruction in grammar and spelling. You will also examine issues of Hispanic diversity in the U.S.

Fulfills MnTC Goal Area 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051

SPAN 1400: Spanish for Healthcare Providers

3.00 credits (3.00 lec)

This course provides the basic tools to help healthcare providers communicate with Spanish-speaking patients in a medical setting. You will acquire medical terminology, phrases, and questions to conduct patient interviews, physical exams and take medical history. You will also learn important cultural aspects of the Hispanic community to understand their view of healthcare.

Prerequisites: SPAN 1100 or equivalent of SPAN 1300; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPAN 2000: Intermediate Spanish Language and Culture 1

5.00 credits (5.00 lec)

Spanish 2000 is a follow-up to the Beginning Spanish sequence. It can also be a review for students with two to four years previous high school experience. You will build upon vocabulary, review grammar and learn further subtleties of Spanish syntax and idiomatic expressions. This course may be useful for native speakers interested in learning grammatical concepts and terminology for teaching Spanish to English-speakers. You will review present tense, past tense and subjunctive verb conjugation, as well as develop communicative skills or techniques necessary for summarizing, paraphrasing, interpreting, and narrating. This course satisfies MnTC Global Perspective requirements by providing readings, lectures, writing exercises, discussions and other presentation media in order to give you useful cultural, historical, sociological and literary insight into the various peoples who speak Spanish throughout the world.

Fulfills MnTC Goal Area 8.

Prerequisites: SPAN 1100 or equivalent; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPAN 2100: Intermediate Spanish Language and Culture 2

5.00 credits (5.00 lec)

Spanish 2100 is a follow-up to Spanish 2000. You will practice writing, reading, speaking and listening skills in preparation for the examination; receive skill evaluations from the final examination sequence based upon the American Council on the Teaching of Foreign Languages (ACTFL) standards; develop greater comfort and fluency if you have previously studied most of Spanish grammar and can already communicate simple ideas and narrate simple information in past, present and future tenses; practice difficult structures such as the use of object pronouns, subjunctive mood, adverbial conjunctions, hypothetical, and future structures; develop communicative skills by the expansion of vocabulary, as well as idiomatic expressions; and will learn to “talk around” unknown vocabulary, express opinions, support them, and engage in discussion and argument. This course satisfies MnTC Global Perspective requirements through readings, lectures, writing exercises, discussions, and other presentation media, giving you a useful cultural, historical, sociological, and literary insight into the various peoples who speak Spanish throughout the world. Contact the Spanish Department at 612-659-6444 for more information.

Fulfills MnTC Goal Area 8.

Prerequisites: SPAN 2000 or equivalent; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Span 2300: Heritage/Intensive Spanish 2

5.00 credits (5.00 lec)

This course will complement and continue Heritage/Intensive Spanish. It is also appropriate for students who have had previous training at the basic level. You will focus on developing communicative competency in academic Spanish reading, writing, and speaking; expand your vocabulary and understand advanced grammatical structures and norms; and develop an understanding of the Liberian roots of U.S. Hispanic culture, human rights issues, the roles of Hispanic women in the culture, and contributions of Hispanics to American visual, oral, and written arts.

Fulfills MnTC Goal Area 8.

Prerequisites: SPAN 1300 or instructor approval.

SPAN 2998: Directed Study

Prerequisites: One course in SPAN; placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Speech Communication

SPCH 1000: Fundamentals of Communication

3 credits (3.00 lec)

This course explores foundational communication concepts and fosters communication skills in interpersonal communication, group communication and public speaking. You will learn concepts, principles and skills designed to help you become a more effective communicator in a variety of contexts.

Fulfills MnTC Goal Area 1.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1005: Public Speaking

3.00 credits (3.00 lec)

This course focuses on introductory public-speaking concepts and skills. You will study the process of formal speaking, with an emphasis on comfortable and competent delivery of speeches; learn how to overcome anxiety, choose a topic, organize and outline speeches, and critically analyze speech-making choices; and demonstrate effective presentation techniques by delivering informative, persuasive, and impromptu speeches.

Fulfills MnTC Goal Area 1.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1010: Interpersonal Communication

3.00 credits (3.00 lec)

Interpersonal Communication focuses on the examination and acquisition of positive and effective interpersonal and intrapersonal communication skills. You will examine your self-concept, relationships with others, perceptions, emotions, nonverbal communication, listening ability, conflict-resolution skills and other aspects of interpersonal communication. You will learn and enhance new communication skills through exercises in class and applications to daily life outside of class.

Fulfills MnTC Goal Area 1.

** MATH 0070 or completion of MATH 0060.*

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1011: Group Process and Discussion

3.00 credits (3.00 lec)

This course examines the dynamics and processes of groups within personal and public contexts. You will explore the nature of groups, how and why groups form and function, as well as how norms and roles evolve within groups. You will participate in group discussions and collaborate in group tasks to apply and experience the principles of group processes, as well as learn to become effective/positive members of a group and to appreciate accomplishment through group efforts.

Fulfills MnTC Goal Area 1.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1012: Intercultural Communication

3.00 credits (3.00 lec)

This course examines the interconnections between communication and culture and identifies ways to develop effective communication strategies in multicultural contexts. You will assess the impact of culture on people's world views and perceptions and examine how this can create difficulties and stumbling blocks when communicating across cultures. You will read, discuss, watch, listen, explore, define, interview, research, and react to how culture impacts your own and others' communication processes.

Fulfills MnTC Goal Areas 1 and 7.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1013: Introduction to Family Communication

3.00 credits (3.00 lec)

This course explores how communication functions within families and emphasizes understanding families as unique communication systems within cultural contexts. You will have the opportunity to explore your family of origin and other family systems to further understand why and how families behave as they do. You will be provided with several theoretical and practical approaches to better understand the dynamics of interaction occurring in families and will develop skills to improve competence in family communication.

Fulfills MnTC Goal Area 1.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 1400–1409: Speech Topics

1.00 credit (1.00 lec)

These courses examine timely topics in the Speech Communication field, including topics that are pertinent and practical in everyday personal and professional communication contexts. Topics may include: principles of persuasion, conflict-resolution skills, relationship communication, male/female communication, the art and skill of listening, the art of storytelling and other topics that meet your needs.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 2000: Speaking in the Community

3.00 credits (3.00 lec)

This course provides individuals who have some speaking experience and knowledge with an opportunity to develop and enhance their oral communication skills and performance abilities. You will work individually with the instructor and in peer sessions to prepare speeches to take out into the community. You will have opportunities for self-expression, public interaction, outreach and exchange; take an active part in selecting your topics and audiences; and use feedback and evaluations to assist you in shaping the content and delivery of your presentations.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

SPCH 2998: Directed Study

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Study Skills

STSK 1150: How to Study

2.00 credits (2.00 lec)

In this course, you will learn the principles of learning and critical thinking, problem-solving, time management, styles of learning and teaching, notetaking, listening, textbook reading, researching, and testing. You will develop strategies and techniques for analyzing your own learning/thinking skills and processes.

Prerequisites: Recommend placement into READ 1300 or completion of READ 0200 or ESOL 0052.

Theatre Arts

THTR 1104: Introduction to Acting 1

3.00 credits (3.00 lec)

This is a performance-oriented course to help you build self-confidence on stage and within yourself and to develop a strong foundation in 21st-century acting techniques. You will perform exercises in front of an audience, including rehearsal and performance of monologues and scenes drawn from multicultural contemporary American theatre. Also covered is training in relaxation and conditioning of the actor's body, voice and mind through improvisations, games, character discussion, and analysis of acting texts. Emphasis is on using a nonthreatening, group-oriented class atmosphere to explore and develop the imagination.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1111: Theatre Arts Workshop

1.00 credit (1.00 lec)

This course is designed to give you hands-on experience in the production of a play. You will first study the different types of theatre and theatre production, and the different ways that sets, costumes, lights, props and sound affect dramatic interpretation. You will work on a play during the semester, either the mainstage production or one of the all-student lab theatre projects in one or more of the following production areas: acting, assistant directing, stage managing, costuming, lighting, scene designing and construction, box office operating, publicizing and/or promoting. You will also critique the effectiveness of the production and your work on it. This course may be repeated for a total of four credits.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1131: Introduction to Theatre

3.00 credits (3.00 lec)

This is a lecture-discussion course that explores the diversity of the live theatre experience through reading assignments, attendance at live theatrical performances, video viewing and in-class discussions. Topics will include multicultural plays and dramatic structure; audience demographics; group response to live theatre; local theatre-going; and an exploration of the political, social and economic impact of theatre in contemporary society. You will learn to become a more informed theater-goer and to gain individual awareness of being in the audience.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1135: Television: Forms/Analysis

2.00 credits (2.00 lec)

This course enhances your enjoyment and aesthetic pleasure in making decisions about the nature of contemporary television viewing. The course will include topical information on television-viewing patterns and examine types of television drama and comedy. You will also explore the political and social implications of television in Western culture.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1145: Stagecraft: Scene Design and Lighting

3.00 credits (3.00 lec)

This course provides you with a solid foundation of understanding and practical application of scene design and lighting for the theatre. Coursework focuses on learning the historical background of current practice, a thorough study of contemporary design theory and practice and work on your portfolios of scene designs and lighting designs based on plays chosen for study. Local theatre scene and light designers will visit the class as guest lecturers to aid you in acquiring current design techniques, as well as to share professional career advice and mentoring. Opportunities for design work on lab theatre projects and mainstage productions will be offered to interested students.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1150: Theatre in the Twin Cities

2.00 credits (2.00 lec)

This course is designed to help you develop an appreciation for and an understanding of the live theatre experience. You will attend three to four plays at Twin Cities area theatres; analyze one of these performances in a written play review; meet theatre artists; and become familiar with theatre criticism, theatre operations, and artistic policies of various local theatre companies. A student ticket fee will cover the expense of the ticket prices for the shows attended by the class.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1160: Acting in Multicultural Theatre

3.00 credits (3.00 lec)

In this class, you will focus on the performance of a variety of multicultural readings (plays, short stories, poems) from global literature. While there may be extensive reading of new play scripts, prose works and poetry, the emphasis of the course will be on the spoken word and the effect of multicultural works in performance. It is assumed that you will not necessarily have training or preparation in performance. Classes will involve group warm-ups, vocal exercise, discussion of readings, and solo and group performances. The basic objective of this theatre course is to experience multicultural literature in performance and to share insights into our multicultural society.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1161: Guthrie Theater

1.00 credits (1.00 lec)

This course provides you with the opportunity to study one of the nation's leading regional theater companies, the Guthrie Theater. You will learn about the history, operations, philosophy, mission and artistic goals, and the current season of plays at the Guthrie. You will read in class the script of a current play in production at the Guthrie, then go see that play in performance there and learn how to write a play review about what you saw.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1162: Children's Theatre Company

1.00 credits (1.00 lec)

This course provides you with the opportunity to study one of the world's leading theatres devoted to plays for children and teenagers, the Children's Theatre Company (CTC).

You will learn about the history, operations, philosophy, mission and artistic goals, and the current season of plays at CTC. You will read in class the script of a current play in production at CTC, then go see that play in performance there and learn how to write a play review about what you saw.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1163: Mixed Blood Theatre

1.00 credits (1.00 lec)

This course provides you with the opportunity to study one of the nation's leading theaters dedicated to racial and cultural inclusion in the selection and production of their plays, the Mixed Blood Theatre Company. You will learn about the history, operations, philosophy, mission and artistic goals, and the current season of plays at Mixed Blood. You will read in class the script of a current play in production at Mixed Blood, then go see that play in performance there and learn how to write a play review about what you saw.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1164: Theatre in the Round

1.00 credits (1.00 lec)

This course provides you with the opportunity to study the premier community theatre in the Twin Cities area, the Theatre in the Round (TRP). You will learn about the history, operations, philosophy, mission and artistic goals and the current season of plays at TRP. You will read in class the script of a current play in production at TRP, then go see that play in performance there and learn how to write a play review about what you saw.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1165: Lab Theatre

2.00 credits (2.00 lec)

This course gives you the opportunity for "hands-on" work experience in acting, directing, or designing in student productions of one-act plays, culminating in live public performances of your work near the end of the semester. You will choose to be an actor, director, designer, or producer/marketer and work through the entire process of production. You will compile a journal as you go, write short essays articulating your response to your chosen play and to your production processes, and discuss/evaluate your plans with your instructor and classmates. After the public performances you will assess with your instructor and classmates in writing and discussion the outcomes of your work.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1166: Acting for the Camera

3.00 credits (3.00 lec)

This course provides you with the fundamentals necessary to act in front of the camera for film, television and commercials. You will practice with the four basic camera shots in exercises as you read and respond to key acting texts focused on camera acting. You will learn how to conduct yourself on the set and how to rehearse and perform in collaboration with a director. You will practice audition fundamentals, learning how to get the part, put together a resumé, receive a photo headshot, and explore local Twin Cities on-camera work opportunities. Acting or directing experience is preferred but not required.

Fulfills MnTC Goal Area 6.

Prerequisite: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1167: Acting Shakespeare

2.00 credits (2.00 lec)

This course provides you with a sound foundation for acting in Shakespeare's plays and learning about Shakespeare's time: 15th—16th century London, the language he spoke, and the stage he helped create on which his plays were originally performed. The course includes video instruction from the Royal Shakespeare Company; reading and discussion of the Bard's scripts; writing your interpretations and personal responses in short essays; journaling; performing acting exercises using Shakespeare's sonnets, monologues, and scenes; and viewing/responding in writing to a local Shakespeare production.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1168: Musical Theatre

2.00 credits (2.00 lec)

This course provides you with the opportunity to learn about the American musical theatre tradition, gaining knowledge, understanding, and insight into its nature, history, philosophy, structure, and its many varied forms. American Musical Theatre is a vital part of the nation's theatrical experience and continues as an ever-renewing form of innovation and delight to audiences in the national and international theatre world. You will learn about musical theatre through a variety of activities, including lecture, large and small group discussion, video, exercises, and readings of scenes and songs from American musicals. The course concludes with learning how to write a play review, the reading of the script, followed by the viewing of a local musical theatre production, after which you will describe and articulate your personal response in your play review.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1169: Stage Makeup

2.00 credits (2.00 lec)

This course gives you the knowledge to successfully apply makeup for stage performance and for other special occasions calling for dramatic/startling facial makeup. You will read and respond in writing and discussion to a classic text on the theory and application of makeup, accompanied by video viewing of makeup applications. You will also practice designing makeup on paper first, followed by applying makeup in the dressing room to your own face or to a live model that you provide. You will explore both realistic and nonrealistic/fantasy styles and other global stage makeup traditions, such as classical Japanese Kabuki Theatre makeup.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 1170: Penumbra Theatre

1.00 credits (1.00 lec)

This course provides you with the opportunity to study one of the great African-American theatre companies still performing today, the Penumbra Theatre Company. You will learn about the history, operations, philosophy, mission and artistic goals, and the current season of plays at one of the nation's premier theatres committed to exploring the African-American experience. You will explore in class the script of a current play in production at Penumbra, then go see that play in performance there and learn how to write a play review about what you saw.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 2105: Introduction to Acting 2

3.00 credits (3.00 lec)

This is a performance course to expand your knowledge of the human condition and human cultures as they relate to acting and to help you analyze and interpret characters in a play. You will perform in several scenes and respond critically to working collaboratively with student directors. Topics covered include stage movement, problem-solving as it relates to character development, performance anxiety, analysis and interpretation of character, and interpretative performances.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 2145: Introduction to Directing

3.00 credits (3.00 lec)

This course is an introduction to the basics of play directing, which includes guiding the beginning director through the various steps involved in casting, staging, rehearsing and presenting a play. You will gain hands-on experience through directing exercises related to composition, stage business and movement for the stage. You will have the opportunity to direct student actors in several assigned scenes for the class.

Fulfills MnTC Goal Area 6.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 2150: Theatre History 1

3.00 credits (3.00 lec)

This course will expand your knowledge of human cultures and the human imagination through an introductory study of theatrical history, classical dramatic literature, and theatrical eras in broad social, political, and economic context. You will read plays from a wide range of time periods, geographic areas, theatrical styles, and subjects as they relate to the human condition and a cultural history of theatre. Topics covered will include theatre's origins, how historians reconstruct the elements of theatre, dramatic play structure, acting, productions, and the visual elements of theatrical performance from an historical perspective.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

THTR 2160: Theatre Capstone

2.00 credits (1.00 lec/1.00 lab)

This course completes the sequence leading to the A.F.A. in Theatre Arts degree and represents your artistic and technical mastery of theatre arts at the associate degree level. You will meet with theatre faculty to choose and create a project. Examples of the project might include: 1) Play a leading role in an MCTC or MSU theatre season production; 2) Direct and/or act in a one-person show or a one-act play for the fine Arts Festival and/or with the Student Theatre Club; 3) Design the sets, costumes and lights for a student production. You will research and analyze your script, developing that theatre script as actor and/or director/or designer into a public performance, and assess the final outcomes with theatre faculty.

Prerequisites: THTR 2105 and THTR 2145.

THTR 2998: Directed Study

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

Welding and Metal Fabrication

WELD 1000: Applied Shop Mathematics and Measuring Devices

3.00 credits (2.00 lec/1.00 lab)

This course covers math commonly used in metal fabrication industries. Problem-solving skills will be developed through classroom exercises related to work done on the job. Use of various measuring devices will also be covered.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 1050: Oxy/Acetylene Welding, Brazing and Cutting

3.00 credits (1.00 lec/2.00 lab)

This course teaches the proper utilization of Oxy/Acetylene equipment and introduces you to welding, brazing and cutting with compressed gases. Equipment safety and safe welding practices are emphasized.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 1100: Shielded Metal Arc Welding

3.00 credits (1.00 lec/2.00 lab)

This course introduces electric arc welding with a flux-coated electrode. You will weld in all positions with various types of electrodes. Arc welding safety, power-sources and electrode selection are also covered.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 1150: Blueprint Reading and Welding Symbols

3.00 credits (2.00 lec/1.00 lab)

This course covers basic blueprint reading related to welding and fabricating industrial products. You will interpret the information found on various types of drawings and become familiar with the welding symbols.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 2000: Layout (Volumes) and Fixtures

2.00 credits (2.00 lab)

This course enables you to develop skills needed in the layout and fabrication of metal projects, aiding you in estimating material usage, piece part accuracy and production efficiency.

Prerequisite: WELD 1000.

WELD 2050: Gas Metal Arc Welding

3.00 credits (1.00 lec/2.00 lab)

This course covers the gas metal arc welding process known commonly as wirefeed or MIG welding. You will learn GMAW theory, power supplies and machine controls. Proper welding technique will also be covered as you utilize welding equipment to complete various projects.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 2100: Flux Core Arc Welding

2.00 credits (2.00 lab)

This course covers the flux core arc welding (FCAW) process known commonly as wirefeed welding. You will learn FCAW theory, power supplies and machine controls. You will also implement proper welding techniques as you use welding equipment to complete various projects.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 2150: Gas Tungsten Arc Welding—DC Applications

3.00 credits (1.00 lec/2.00 lab)

This course covers the theory, power sources and machine controls utilized in gas tungsten arc welding commonly known as TIG welding. You will be welding on a variety of materials using direct current. Proper welding technique will also be covered.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 2200: Gas Tungsten Arc Welding—AC Applications

2.00 credits (2.00 lab)

This course covers the theory, power sources and machine controls utilized in gas tungsten arc welding commonly known as TIG welding. You will be welding on primarily aluminum alloys using alternating current. Proper welding technique will also be covered.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into MATH 0070 or completion of MATH 0060.

WELD 2500: Fabrication Shop/ Equipment

3.00 credits (1.00 lec/2.00 lab)

This course provides the knowledge and skills necessary to operate automated shop equipment. You will learn basic CNC (computer numerical control) programming associated with the use of a press brake, automated burning table and robotic arm (for automated welding).

Prerequisite: WELD 1000.

Western Herbalism

HERB 1000: History of Herbalism

3.00 credits (3.00 lec)

In this course, students will explore the history and development of herbal medicine throughout time. They will learn various cultural traditions of herbalism, as well as the evolution of plant medicine usage up to current times; learn the basic overview of European, Early American, Native American, traditional Chinese, and Ayurvedic approaches to herbalism; and explore the ethical concepts of herbalism.

Prerequisites: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

HERB 1100: Herbs in the Marketplace

3.00 credits (3.00 lec)

In this course, students will learn how to manage knowledge in an ever-changing industry of herbal products. This course introduces botanical concepts, as well as important points to consider when seeking an herbal provider, choosing herbal remedies for personal use and the effects of consumerism on the herbal industry. This course provides an introduction to research and an interpretation of information that appears in the media. Students will learn principles for accessing research on the Internet; discuss herbal terminology, herbal safety, and industrial contamination production; and be introduced to ethnic concepts and ethno-botany. This course includes the 12–24 most commonly used and advertised herbs. This course addresses self-limiting diagnosis, as well as discussion of when to go to other licensed providers. Course is open to the general public and includes approximately four hours service learning on campus.

Prerequisite: Placement into READ 1300 or completion of READ 0200 or ESOL 0052.

Women's Studies

WOST 1101: Introduction to Women's Studies

3.00 credits (3.00 lec)

This class uses an interdisciplinary approach to examine some of the themes, questions, and findings of women's studies scholarship. You will use readings, films, and class discussion to explore social, psychological, biological, and cultural aspects of women's experiences, ranging from the personal to the public. You will consider cultural notions of women and examine how women's lives have been shaped by gender identities and gender inequality. Finally, focusing on women as a force in social change, you will explore the profound ways in which the personal is political.

Fulfills MnTC Goal Areas 5 and 9.

Prerequisites: Placement into READ 0200 or placement into ESOL 0052 or completion of READ 0100 or ESOL 0042 with faculty recommendation into ESOL 0052; placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

WOST 1120: Introduction to Lesbian Culture

3.00 credits (3.00 lec)

This course explores experiences of and theories about lesbians from various cultures in the United States between the late 19th century and the present. You will explore a variety of texts and other media sources to learn about the history, meanings, and representations of relationships between women and to gain a better understanding of lesbian identities and perspectives.

Fulfills MnTC Goal Areas 5 and 7.

Prerequisites: One course from the MnTC Goal Area 1.

WOST 1140: Women's Culture

3.00 credits (3.00 lec)

This course looks at women's culture through a number of artistic and scholarly lenses. You will consider whether women share a universal culture and look at the cultural differences found in the United States among women of various ethnicities, social classes, and sexualities. You will learn how women have contributed to culture through the arts and humanities and assess women's impact on political and social institutions. Finally, you will consider how women's bodies affect the way they experience and create culture.

Fulfills MnTC Goal Areas 6 and 7.

Prerequisites: Placement into ENGL 1110 or completion of ENGL 0900 or ESOL 0051.

WOST 2200: View of Modern Women

3.00 credits (3.00 lec)

This course is an interdisciplinary view of the feminine psyche. You will study the psychological make-up of modern women from a humanistic perspective. You will read about feminine literary creativity, examine historical perspectives of the feminine conditioning process and read a psychological novel.

Fulfills MnTC Goal Area 6.

Prerequisite: One course from the MnTC Goal Area 1.

WOST 2211: Women's Response to Violence

3.00 credits (3.00 lec)

This course provides an overview of violence against women and of women's creative and community-building responses to that violence. You will explore women's ways of coping with domestic violence, war, stalking, rape, homicide, sexual assault, and sexual harassment.

Fulfills MnTC Goal Areas 6 and 9.

Prerequisite: One course from the MnTC Goal Area 1.

WOST 2212: Ecofeminism

3.00 credits (3.00 lec)

This course introduces the philosophies and viewpoints of the global ecofeminism movement and considers various approaches to address the ecological challenges that women face. You will explore the connection between the economic development of the natural world and women's status and roles worldwide.

Fulfills MnTC Goal Areas 6 and 10.

Prerequisite: ENGL 1110.

WOST 2213: Empowerment and Women

3.00 credits (3.00 lec)

This course uses women's creative expressions and experiences to examine the movement from powerlessness to power, both on individual and societal levels. You will learn about a variety of empowerment experiences, from personal narrative to women's movements from around the world, all focused on ways that women find activism, engagement, and strength. You will consider the feminist movement in general and other activism organized by women. You will explore ways that women find their voices, tell their own stories, take control of their lives and gain a sense of their own power.

Fulfills MnTC Goal Areas 6 and 9.

Prerequisite: ENGL 1110.

WOST 2235: Women Poets of the World

3.00 credits (3.00 lec)

This course explores the poetic themes, forms, and styles of the major women poets of the world, including English and non-English writers in translation. You will also examine the relationship between language, creative expression and power as they are experienced by women poets around the world.

Fulfills MnTC Goal Areas 6 and 8.

Prerequisite: One course from the MnTC Goal Area 1.

WOST 2998: Directed Study

Prerequisite: One course from the MnTC Goal Area 1.

Appendix: College Policies

For a complete listing of College policies see <http://www.minneapolis.edu/collegepolicies/index.cfm>

Equal Opportunity

- [2.01 Nondiscrimination](#)
 - [2.01.01 Investigating Complaints of Discrimination and Harassment](#)
- [2.04 Affirmative Action in Employment](#)
- [2.05 Individuals with Disabilities](#)
- [2.06 Servicing Students with Disabilities](#)
- [2.07 Religious Accommodations](#)
- [2.08 Sexual Violence Policy](#)

Academic Affairs

- [3.01 Office of Academic Affairs](#)
- [3.02 Earning Academic Credits](#)
- [3.03 Degrees, Diplomas and Certificates](#)
- [3.04 General Education](#)
- [3.05 Minnesota General Education Transfer Curriculum](#)
- [3.08 Grading](#)
 - [3.08A Student Academic Records](#)
- [3.09 Graduation Requirements](#)
- [3.11 Participation in Course Activities](#)
- [3.12 Academic Property Rights](#)

Student Affairs

- [4.01 Admissions](#)
- [4.02 Assessment Testing for College Readiness](#)
- [4.03 Campus Student Association](#)
 - [4.03.01 Appeal Procedure -- Senate Student Decisions](#)
- [4.04 Student Code of Conduct](#)
 - [4.04.01 Student Code of Conduct Procedures](#)
- [4.05 Course Enrollment](#)
 - [4.05.01 Procedures for Changing Enrollment](#)
- [4.06 Drug and Alcohol-Free Campus and Worksite Policy](#)
- [4.07 Emergency Student Contact](#)
- [4.08 Financial Aid](#)
- [4.09 Students Rights and Responsibilities - Freedom of Expression](#)
- [4.10 Student Complaints and Grievance Policy](#)
 - [4.10.01 Student Complaint and Grievance Procedures](#)
- [4.11 Student Records Policy](#)
- [4.12 Recruiting on Campus](#)
- [4.13 Satisfactory Academic Progress](#)
- [4.15 Student Life Budget Committee](#)
- [4.16 Last Date of Attendance](#)

Financial Affairs

- [5.08 Tuition and Fees](#)
- [5.09 Tuition Refunds and Waivers](#)
- [5.16 Resident Tuition](#)

Human Resources

- [6.05 Internet and E-mail Use](#)

Safety and Security

- [7.01 Zero Tolerance for Violence](#)
- [7.02 Smoke Free Campus](#)

Facilities

- [8.03 Parking Areas and Enforcement](#)
- [8.04 Weather Emergency Closing or Cancellation Policy](#)
 - [8.04.01 Weather Emergency Closing or Cancellations Procedure](#)

Index

A

Academic Affairs Office	33
Academic Calendar	viii
Academic Credits	18
Accessibility	35
Accounting	42–43
Addiction Counseling	44–45
Adding Classes	14
Admissions Office	32
Admission Process:	
Award-Seeking Applicants	2
High School Applicants	3
International Nonimmigrant Visa Holders	3
Non-Award-Seeking	2
Non-High School/GED Graduates	2
Postsecondary High School Applicants	3
Power of YOU	3
Senior Citizen Applicants	3
Transfer Students	2
Advising Services	34
Air Traffic Control	46
Aircraft Technician	47–49
American Indian Studies	50
Apparel Technologies	51
Application Deadlines	2
Architectural Technology	52
Areas of Study	iv
Articulation Agreement Information	40–41
Associate in Applied Science Degree	23
Associate in Arts Degree	22
Associate in Fine Arts Degree	23
Associate in Science Degree	23
Attendance	15
Auditing a Class	15
Awards (MCTC)	v–vi, 22–24

B

Barbering	53
Biology	54
Biotechnology	55
Bookstore	33
Boynton Health Service	38
Business Management	56–57
Business Office Administration	58–60
Business Services	32

C

Campus Safety and Security	36
Cancellation of a Class Session	20
Career Development Services	36
Catalog Requirements	26
Central Services Technician	61
Certificates	23

Change of Address/Name	28
Chemistry	62
Childcare Assistance	12
Child Development	63–65
Cinema: Cinema Production	66–67
Cinema: Cinema Studies	68
Cinema: Cinematic Visual Effects	69–70
Cinema: Cinematography	71–72
Cinema: Digital Animation	73–74
Cinema: Directing and Producing	75–76
Cinema: Editing and Postproduction	77–78
Cinema: Screenwriting	79–80
Cinema: Sound for Cinema	81–82
Class Syllabus	19
Clinicals	18
Clubs and Activities	37
College Offices and Services	31–38
Community Development	83
Community Health Worker	84
Computer Forensics	85–86
Computer Science	87
Computer Services	33
Computer Software Development	88–92
Computer Support and Network Administration	93–98
Construction Electricity	99
Contacting Faculty	33
Continuing Education and Training	18–19
Counseling and Advising Office	32
Counseling Services	34
Course Cancellation	14
Course Descriptions	151–282
Course Fees	8
Course Options	18–19
Credit Load Limitations	14
Credits Earned at MCTC	26
Credit-Earning Options	26
Criminal Justice Studies	100
Culinary Arts	101–102

D

Deans' Honor List	28
Declaring Your Major	3
Deferment of Tuition	8
Dental Assistant	103–105
Diplomas	23
Directed Study	18
Directory: Important Numbers	vii
Disability Services	35
Dropping Classes	14
Drop for Nonpayment Policy	8

E

Earning an Award	21–26
Education	106–107
Educational Opportunity Center	35
Educational Support Services	34–36
Electroneurodiagnostic Technology	108–109
Emergency Student Contact	28
Employer-Sponsored Tuition Reimbursement	12
Evaluating Academic Performance	19

F

Fees—Tuition	8–9
Final Exams	19
Financial Aid	10–12
Financial Aid Office	32
Fine Arts	109

G

General Admission	2
General Education	24–26
Getting Started	1–6
Global Studies	110
Grade Reports and Transcripts	28
Grading System	19
Graduation Requirements	26
Grants	11
Graphic Design: Print Media	111–112
Graphic Design: Web and Interactive Media	113–114

H

Healthcare Core Curriculum	115
Heating, Ventilation, Air Conditioning and Refrigeration	116–117
High School Applicants	2–3
High School Upward Bound	35
Homeland Security Specialist	118–119
Housing	37
Human Services	120–121

I

Important Information	vii
Important Phone Numbers	vii
Incomplete Grades	19
Instructional Services	33
Insurance	37
Intent to Graduate	26
International Student Applications	3
International Student Services	34
Internships and Clinicals	18

J

Job Listings	36
------------------------	----

L

Late Payment—Tuition and Fees	8
Law Enforcement	122–123
Learning Center	34
Legal Office Specialist	124
Library	33
Library Information Technology	125–126
Loans	11

M

Machine Tool Technologies	127–128
Maps and Directions	284–285
Mathematics	129–130
MCTC Awards	22–23
MCTC Campus Card	32
Media Production	131–132
Medical Office Assistant	134
Midwest Student Exchange Program	9
Minnesota General Education Transfer Curriculum Competencies	24–26
Multicultural Student Services	34
Multiple Sections Prohibited	14
Music Ensembles	37

N

Name Change	28
New Student Orientation	5
Newspaper (Student)	38
Nursing	135–137
Nursing Assistant/Home Health Aide	138

O

Online AA	22
Online Courses	18
Orientation	5

P

Parking	36
Parking Access Card	36
Pass/Fail Enrollment	15
Paying for College	7–12
Payment Options—Tuition	8
Phi Theta Kappa (PTK)	38
Phlebotomy	139
Photography and Digital Imaging	140–141
Placement Testing	4–5
Polysomnographic Technology	142
Postsecondary Education Option Program (PSEO)	3
Power of YOU	3, 32
Prerequisites	14
Programs and Credentials	39–150
Project SHINE	18

R

Readmission	3
Reciprocity Agreements	9
Recreation and Leisure Activities	38
Registering for Classes	14
Registrar's Office	32
Registration Cancellation for Nonpayment	8
Registration Process	14–16
Repeating a Course	15
Residency Requirements	29
Resource and Referral Services	32
Restaurant Management	143

S

Safety and Security	36
Scholarships and Other Sponsored Funding	12
Childcare Assistance: Postsecondary Childcare Grant	12
MCTC Foundation Scholarship Program	12
Minnesota Indian Scholarship Program	12
Tribal Indian Scholarship Program	12
Tuition Assistance for Deaf Students	12
Tuition Reimbursement Programs	12
Veterans Benefits	12
Vocational Rehabilitation	12
Senior Citizen Applicants	3
Service Learning	18
Sound Arts	144–145
Starting Point	35
Student Affairs Office	32
Student Ambassadors	38
Student Clubs	37
Student Grade Reports and Transcripts	28
Student Health Service	38
Student ID Cards (MCTC Campus Card)	32
Student Life	36
Student Life Office	38
Student Newspaper	38
Student Organizations	37–38
Student Records	27–29
Student Senate	38
Student Services Center	32
Syllabus	19

T

Taking Classes	15, 17–19
Talent Search	36
Testing Center	32
Theatre Arts	37, 146
Transcripts	28
Transferring of Credit to MCTC	3
Tuition	8–9
Tuition Assistance for Deaf Students	12
Tuition Deferment	9
Tuition Refunds and Waivers Policy	9

V

Veterans Benefits	12
Veterans Services Office	34
Veterans Upward Bound	36
Veterans Welcome Center	34
Visual Arts	147

W

Waiver/Deferment—Tuition	9
Welding and Metal Fabrication	148
Withdrawal from Classes	15
Women's Studies	149
Women's Upward Bound	36
Work Study	11

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.