NORMANDALE COMMUNITY COLLEGE

Academic Programs Course Descriptions

2022 - 2023

Normandale Community College 9700 France Avenue South Bloomington, MN 55431-4399 952-358-8200 www.normandale.edu



Normandale is a member of the Minnesota State Colleges and Universities system.

This system is governed by a 15-member Board of Trustees appointed by the governor.

Requirements of this catalog are subject to change as a result of state and federal legislation, policies of the Minnesota State Colleges and Universities Board of Trustees, and other reasons deemed necessary by the faculty and administration of Normandale Community College.

The provisions of this catalog are effective from the beginning of Fall Semester 2021 through Summer Session 2022 but are not to be regarded as an irrevocable contract between the student and the college.

The college reserves the right to change any provision or requirement at any time within the student's term of enrollment.



DEGREES	PAGE NUMBER	DEGREES
Associate of Arts (AA) in Liberal Education	12.	German - Associate of Arts
Accounting Transfer Pathway (AS)	13.	Global Studies Certificate.
Accounting Certificate	14.	Health Science Broad Field
Anthropology - Associate of Arts Emphasis (AA)	15.	Healthcare Systems Techn
Applied Mathematics (AS)	16.	History Transfer Pathway (
Field Archaeology Certificate	17.	Hospitality Management (A
Archaeology - Associate of Arts Emphasis (AA)	18.	Hotel Marketing and Sales
Art Transfer Pathway (AFA)	19.	Hotel Operations Certificat
Art - Associate of Arts Emphasis (AA)	21.	Human Resource Manage
Biology Transfer Pathway (AS)	22.	Individualized Studies (AS)
Business: Marketing and Management (AAS)	23.	International Experience C
Business Transfer Pathway (AS)	24.	Law Enforcement Transfer
Casino Operations and Management Certificate	26.	Law Enforcement Certifica
Chemistry Transfer Pathway (AS)	27.	Management Certificate
Communication Studies Transfer Pathway (AA)	28.	Marketing Certificate
Community Health Worker Navigator Certificate	29.	Mathematics Transfer Pati
Computers/Information Management (AAS)	30.	Music (AFA)
Computers/Information Certificate	31.	Nursing (AS)
Computer Science Transfer Pathway (AS)	32.	Nursing Assistant Certifica
Computer Technology (AAS)	33.	Philosophy - Associate of A
Computer Technology Certificate	35.	Physics - Associate of Arts
Creative Writing (AFA)	36.	Political Science Transfer I
Creative Writing Certificate	38.	Psychology Transfer Pathw
Criminal Justice Transfer Pathway (AS)	39.	Public Health (AS)
Data Analytics (AS)	40.	Religious Studies Certifica
Dental Hygiene (AS)	41.	Small Business Manageme
Economics Transfer Pathway (AA)	45.	Sociology Transfer Pathwa
Elementary Education Foundations Transfer Pathway	/ (AS47.	Spanish Transfer Pathway
Engineering Broad Field (AS)	48.	Spanish Certificate
English Transfer Pathway (AA)	50.	Special Education Foundar
Exercise Science Transfer Pathway (AS)	52.	Theatre Performance Tran
Exercise Specialist Certificate	53.	Theatre Production and De
Family Studies Certificate	54.	Tourism Operations and M
Food and Beverage Management Certificate	55.	Vacuum and Thin Film Tec
Food Science (AS)	56.	Vacuum Maintenance Tec
French - Associate of Arts Emphasis (AA)	57.	Vacuum Technology Certifi

DEGREES	PAGE NUMBER
German - Associate of Arts Emphasis (AA)	59.
Global Studies Certificate	60.
Health Science Broad Field (AS)	61.
Healthcare Systems Technology (AAS)	62.
History Transfer Pathway (AA)	63.
Hospitality Management (AAS)	65.
Hotel Marketing and Sales Certificate	66.
Hotel Operations Certificate	67.
Human Resource Management Certificate	68.
Individualized Studies (AS)	69.
International Experience Certificate	70.
Law Enforcement Transfer Pathway (AS)	71.
Law Enforcement Certificate	72.
Management Certificate	73.
Marketing Certificate	74.
Mathematics Transfer Pathway (AA)	75.
Music (AFA)	76.
Nursing (AS)	77.
Nursing Assistant Certificate	80.
Philosophy - Associate of Arts Emphasis (AA)	81.
Physics - Associate of Arts Emphasis (AA)	82.
Political Science Transfer Pathway (AA)	83.
Psychology Transfer Pathway (AA)	85.
Public Health (AS)	86.
Religious Studies Certificate	87.
Small Business Management Certificate	88.
Sociology Transfer Pathway (AA)	89.
Spanish Transfer Pathway (AA)	90.
Spanish Certificate	91.
Special Education Foundations Transfer Pathway (AS) 92.
Theatre Performance Transfer Pathway (AFA)	94.
Theatre Production and Design Transfer Pathway (AFA	A) 96.
Tourism Operations and Management Certificate	98.
Vacuum and Thin Film Technology (AAS)	99.
Vacuum Maintenance Technician Certificate	100.
Vacuum Technology Certificate	101.
Women's Studies - Associate of Arts Emphasis (AA)	102.

Degrees & Certificates Awarded

Normandale's academic awards include certificates (4-30 credits), Minnesota Transfer Curriculum (MnTC) certification (40 credits), and degrees (60 or more credits).

Except for a few of the technical certificates, all awards require some general education. Minnesota State colleges define general education in terms of Minnesota Transfer Curriculum (MnTC) goals. All degrees require that some number of MnTC goals be completed. Three MnTC goals must be completed for an Associate of Applied Science (AAS) degree, 6 goals For the Associate of Science (AS), and all 10 goals for the Associate of Arts (AA). General Education credits for the Associate of Fine Arts (AFA) programs vary.

Certificates will always require the completion of a specific set of specialized coursework. Except for the AA, all degrees also have specialized course requirements in the form of a major and/or emphasis.

The AA degree major is always Liberal Education. It allows up to 20 elective credits. However, students are encouraged to complete one of several available emphases consisting of up to 20 credits of specialized coursework.

The AFA, AS, and AAS degrees each have a major that corresponds to the program of study. The number of credits required in the majors is 30 credits for the AS, 40 credits for the AAS and varies for the AFA.

It is often possible to earn one or more certificates on the way to completing degree requirements. It is also common for those who already have earned degrees to continue to earn specialized certificates throughout their careers.

Associate of Arts (AA)

The Associate of Arts degree (AA) is intended primarily for students who plan to transfer to another college to complete a bachelor's degree. The AA degree is a generalist liberal arts degree. Many students choose to concentrate in a particular field of study as preparation for a planned major at a four-year college or university. Students may choose to follow one of the emphases or develop an individual plan within the general AA degree. Both options are designed to identify the appropriate core

of courses for transfer in a student's major to their chosen four-year college or university. At least 40 of the 60 credits must be taken within the Minnesota Transfer Curriculum (MnTC). Students are strongly encouraged to develop an educational plan in consultation with a Normandale counselor or academic advisor to assure that degree requirements are fulfilled.

Associate of Arts with Emphasis

Each of the emphasis areas of the AA degree is designed to provide students with a listing of the core courses needed in preparation for transfer within that major. Earning an AA degree with an emphasis allows students to deepen their breadth of knowledge in a particular subject area while more thoroughly preparing them for the major at corresponding baccalaureate programs at several public and private four-year colleges and universities. To earn the AA with Emphasis, students need to complete all requirements for a general AA degree, including the specific requirements of their chosen emphasis. Courses within specific emphases may satisfy either elective or MnTC requirements. Students satisfying graduation requirements for the degree will have the AA degree and the appropriate emphasis documented on their academic transcript. Careful planning with a counselor or academic advisor is strongly advised to tailor any of the emphasis areas to meet the requirements of the student's chosen four-year college or university.

Associate of Science (AS)

The Associate of Science degree (AS) is intended for those students who wish to balance liberal arts education with career-oriented classes. The primary purpose of the degree is to provide the credentials for a specific career and to prepare graduates for admission to a four-year college or university. Credit and course requirements are unique for each program. Refer to the curriculum requirements listed in the Programs and Majors section of this catalog for specific requirements of each AS degree program. Approximately one-half of the course work consists of liberal arts or general education credits, and one-half include career-oriented courses. The extent to which credits transfer to a four-year college varies with the specific program completed and the subsequent major selected. Specific transfer agreements exist with selected four-year colleges for each AS program; check with a counselor or academic advisor.

Associate of Applied Science (AAS)

The Associate of Applied Science degree (AAS) is intended for Associate of Applied Science degree (AAS) is intended for those students who plan to use the competence gained through their degree for immediate employment. The AAS degree is granted in a specific major, and typically at least one-half of the course work is in the program area, approximately one-third is in general education and liberal arts, and the balance of credits are either in the program area or general education depending on the specific major chosen. The AAS degree is not designed to transfer to a four-year college. However, the general education and liberal arts courses typically do transfer and some of the career-oriented courses also may transfer to specific majors at selected schools. Students are encouraged to consult with a Normandale counselor or academic advisor for information about transferring credits to other colleges and universities.

Associate of Fine Arts (AFA)

The Associate of Fine Arts degree (AFA) is a two-year degree for students who will eventually transfer and pursue a Bachelor of Fine Arts degree and also for students interested in entering the job market. Students take 30 credits in general requirements and 30 credits in fine art. Courses in music, art or theatre may transfer in part or in entirety to baccalaureate institutions. In order to plan a program, students should consult with a counselor or academic advisor.

Minnesota State Transfer Pathway Degrees

Through Transfer Pathways, students enrolled at a Minnesota State College will be able to select from more than 30 fields that will prepare them to complete related bachelor's degrees at any Minnesota State university offering a degree in that field. Students who complete the transfer degree will be guaranteed junior status upon admission to the university. The student will still need to meet any special admission requirement for the major. The bachelor's degree will be completed in 60 additional credits.

Certificates

Concentrated programs of study are available in certain areas as certificates. Certificates are awarded to students upon completion of a specific career program with a GPA of at least 2.00. The programs are designed for those students who wish to develop vocational skills for entry-level employment in specific career areas.

Articulation Agreements

Articulation agreements are formal agreements between two or more colleges and/or universities to accept credits in transfer toward a specific academic program. Normandale Community College participates in articulation agreements with a number of public and private colleges and universities in Minnesota and Wisconsin. The agreements Normandale has entered with Minnesota State institutions are available at www.mntransfer.org. Visit an advisor or counselor or the Nath Advising Center for information about articulation agreements with non-Minnesota State system institutions.



Minnesota Transfer Curriculum

The Minnesota Transfer Curriculum (MnTC) is the result of a collaborative effort by all of the two- and four-year public colleges and universities in Minnesota to define a common philosophy toward general education. The goal of this effort is to help students transfer their work in general education. Completion of a defined transfer curriculum at one institution enables a student to receive credit for all lower-division general education upon admission to any other Minnesota State institution.

To complete the MnTC, students must satisfy the requirements of each of the 10 Goal Areas with a minimum of 40 credits. (Note that some courses satisfy more than one goal, but the number of credits for those courses will only be counted once.) Students must earn a minimum of a cumulative 2.0 GPA on the MnTC courses.

Visit http://www.mntransfer.org/students/plan/s mntc.php for details about the goal competencies of the Minnesota Transfer Curriculum.

GOAL AREA 1: COMMUNICATION - 2 COURSES

10/12/11/21/21 COMMINICATION 2 COCKOZO				
			Goal	
Course #	Course Title	Credits	Area	
ENGC 1101	College Writing	4	1	
Communication	- 1 course			
	Introduction to			
COMM 1100	Communication	3	1	
	Fundamentals of Public			
COMM 1101	Speaking	3	1	
	Interpersonal			
COMM 1111	Communication	3	1	
	Small Group			
COMM 1121	Communication	3	1	

GOAL AREA 2: CRITICAL THINKING

Met by completing all 40 credits of the Minnesota Transfer Curriculum.

GOAL AREA 3: NATURAL SCIENCES - 2 COURSES

Select 2 courses from a minimum of 2 departments: 1 must include a laboratory experience (lab courses identified with an *)

			Goal
Course #	Course Title	Credits	Area
BIOL 1100*	Survey of Biology	4	3
BIOL 1101*	Introduction to Human Genetics	4	3
BIOL 1102*	Human Biology	4	3
BIOL 1103*	Introduction to Emerging Diseases	4	3, 8
	MN Natural History and		
BIOL 1104*	Field Biology	4	3, 10
BIOL 1110	Environmental Biology	3	3, 10
BIOL 1120	Introduction to Evolutionary Biology	3	3
BIOL 1125	Sex and Human Diversity	3	3, 7
BIOL 1501*	Principles of Biology 1	5	3
BIOL 1502*	Principles of Biology 2	4	3
BIOL 2042*	Human Physiology	4	3
BIOL 2043*	Microbiology	4	3

			Goal
Course #	Course Title	Credits	Area
BIOL 2202*	Animal Diversity	4	3
BIOL 2203*	Botany	4	3
BIOL 2205*	Genetics	4	3
BIOL 2206*	Ecology	4	3, 10
BIOL 2207*	Cell Biology	4	3
BIOL 2201	Biology of		
BIOL 2208*	Microorganisms	4	3
2.02.220	Real World Chemistry		
CHEM 1001*	and Lab	4	3
CHEM 1010*	Environmental Chemistry	4	3, 10
CHEM 1020*	Introductory Chemistry	4	3
	Foundations of Organic		
CHEM 1050*	and Biochemistry	3	3
CHEM 1061*	Principles of Chemistry 1	5	3
CHEM 1062*	Principles of Chemistry 2	5	3
CHEM 2061*	Organic Chemistry 1	5	3
CHEM 2062*	Organic Chemistry 2	5	3
	Earth's Natural		
GEOG 1101*	Environments	4	3,10
	Climate Change: Science,		
GEOG	Human Impacts and		
1130179	Adaptations	3	3, 8
GEOG 1172*	Introductory Meteorology	4	3, 10
GEOL 1050*	Earth History	4	3, 9
GEOL 1101*	The Dynamic Earth	4	3, 10
GEOL 1110	Environmental Geology	3	3, 10
	Environmental Geology +		
GEOL	Environmental Geology		
1110+1111*	Lab	4	3, 10
GEOL 1120	Oceanography	3	3, 10
	Climate Change: Science,		
	Human Impacts and		
GEOL 1130	Adaptations	3	3, 8
	Energy, Climate & Physics		
PHYS 1001	in Society	3	3, 9

			Goal
Course #	Course Title	Credits	Area
	Energy, Climate & Physics		
	in Society +		
PHYS	Energy, Climate & Physics		
1001+1002*	in Society Lab	4	3, 9
	Survey of Classical		
PHYS 1050*	Physics	4	3
PHYS 1104	Survey of Astronomy	3	3
PHYS 1110*	College Physics 1	4	3
PHYS 1111*	College Physics 2	4	3
PHYS 1114*	Introductory Astronomy	4	3
	Physics 1 for Scientists		
PHYS 1121*	and Engineers	5	3
	Physics 2 for Scientists		
PHYS 1122*	and Engineers	5	3
	Physics 1 with		
PHYS 1201*	Biomedical Applications	4	3
	Physics 2 with		
PHYS 1202*	Biomedical Applications	4	3
PHYS 2250	Modern Physics	4	3

GOAL AREA 4: MATHEMATICAL / LOGICAL REASONING - 1 COURSE

			Goal
Course #	Course Title	Credits	Area
	Discrete Structures of		
CSCI 2011	Computer Science	4	4
	Math Trek: Math for		
MATH 1020	Liberal Arts	3	4
	Elements of Mathematics		
MATH 1055	1	4	4
	Elements of Mathematics		
MATH 1065	2	4	4
MATH 1080	Introduction to Statistics	4	4
MATH 1090	STATWAY Statistics 2	4	4
	STATWAY Statistics:		
MATH 1095	Accelerated	4	4
MATH 1100	College Algebra	4	4
MATH 1150	Trigonometry	4	4
MATH 1200	Finite Mathematics	4	4
MATH 1400	Survey of Calculus	4	4
MATH 1500	Pre-Calculus	5	4
MATH 1510	Calculus 1	5	4
MATH 1520	Calculus 2	5	4
	Discrete Structures of		
MATH 2011	Computer Science	4	4
MATH 2080	Statistical Modeling	3	4
	Probability and Statistics		
MATH 2400	with Calculus	4	4
	Calculus 3: Multivariable		
MATH 2510	Calculus	5	4

Course #	Course Title	Credits	Goal Area
Course #		Credits	Alea
	Calculus 4: Differential		
	Equations with Linear		
MATH 2520	Algebra	5	4
	Foundations of		
	Mathematics and Logic:		
MATH 2700	Writing Intensive	4	4
PHIL 1102	Logic	3	4

GOAL AREA 5: HISTORY AND SOCIAL/ BEHAVIORAL SCIENCES - 2 COURSES $\,$

Select 2 courses from a minimum of 2 departments

			Goal
Course #	Course Title	Credits	Area
	Introduction to		
	Anthropology- What it		
ANTH 1100	Means to be Human	3	5, 8
ANTH 1101	Cultural Diversity	3	5, 8
	Introduction to Women's		
ANTH 1120	Studies and Gender Studies	3	5, 9
ANTH 1121	Women Across Cultures	3	5, 8
	Cultural Anthropology-The		
ANTH 1127	Global Human Experience	3	5, 8
	Introduction to Forensic		
ANTH 1145	Anthropology	3	5, 7
	Seeing Culture Through		
ANTH 1148	Film and Fieldwork	3	5, 8
ANTH 1150	Native American Voices	3	5, 7
	Magic, Witchcraft and		
	Religion: The Anthropology		
ANTH 1188	of Religion	3	5, 8
	Human Evolution-An		
	Introduction to Bio-		
ANTH 1210	Anthropology	4	5, 10
	Archaeology-Prehistory and		
ANTH 1230	Humanity's Cultural Origins	4	5, 10
	Field Archaeology-Methods		
ANTH 1235	of Exploring the Past	3	5, 9
	Archaeology of Minnesota-		
ANTH 1236	Prehistoric Native Cultures	3	5, 10
	Medical Anthropology:		
	Health, Illness and Healing		
ANTH 1899	Across Cultures	3	5, 8
	Introduction to Field		
ANTH 2126	Archaeology	3	5
COMM 1106	Mass Media	3	5, 9
COMM 2111	Family Communication	3	5
ECON 1200	Consumer Economics	3	5, 9
ECON 1400	Survey of Economics	3	5, 9
	Principles of		
ECON 2201	Microeconomics	3	5, 9

			Goal
Course #	Course Title	Credits	Area
	Principles of	O. Guillo	71.00
ECON 2202	Macroeconomics	3	5, 8
	Introduction to Maps and		10,0
GEOG 1050	Places	3	5, 8
GEOG 1102	Human Geography	3	5, 8
	Resources, Society and		-,-
GEOG 1104	Environment	3	5, 10
GEOG 1121	World Regional Geography	3	5, 8
GEOG 1123	Geography of Minnesota	3	5. 10
GEOG 1124	Geography of Latin America	3	5, 8
	History of World Civilizations		-,-
HIST 1101	1	4	5, 8
HIST 1102	History of World Civilizations 2	4	5, 8
HIST 1111	United States History 1	4	5, 7
HIST 1112	United States History 2	4	5, 7
	Family: Sex/Gender/Power:		- /
	A Cross-Cultural, Historical		
HIST 1131	Perspective	3	5, 8
HIST 1133	Minnesota History	3	5, 10
HIST 2101	History of East Asia	3	5, 8
	Latin American History-Pre-		-, -
HIST 2102	Conquest to the Present	3	5, 8
	Lesbian, Gay, Bisexual, and		-, -
HIST 2111	Transgender U.S. History	3	5. 7
	World in the Era of the		- /
HIST 2201	World Wars	3	5. 8
POLS 1130	Introduction to U.S. Politics	3	5, 9
	Introduction to Comparative		-, -
POLS 1132	Politics	3	5, 8
POLS 1133	Middle East Politics	3	5, 8
	Introduction to Political		-,-
POLS 1135	Ideas	3	5, 9
	Introduction to World		-,-
POLS 1150	Politics and Globalization	3	5, 8
POLS 1152	Model United Nations	3	5, 7
POLS 1195	Conflict and Negotiation	3	5, 7
POLS 2250	Constitutional Law	3	5, 9
PSYC 1100	Psychology in Modern Life	3	5
	Child and Adolescent		
PSYC 1109	Development	3	5
PSYC 1110	Introduction to Psychology	4	5
PSYC 1140	Psychology of Gender	3	5, 7
	Psychology of Adulthood	1	
PSYC 1220	and Aging	3	5, 7
-	Statistics for the Behavioral		,
PSYC 2100	Sciences	4	5
PSYC 2200	Abnormal Psychology	3	5, 7
	Developmental Psychology:	1	
PSYC 2210	Life Span	4	5, 7
		3	5
PSYC 2300	Psychology of Personality		

			Goal
Course #	Course Title	Credits	Area
	Psychology of Religion and		
PSYC 2400	Spirituality	3	5, 7
PSYC 2500	Biopsychology	3	5
	Introduction to Social		
PSYC 2600	Psychology	3	5, 7
SOC 1100	Modern US Society: Everyday Life in the United States of America	3	5, 7
SOC 1102	Love, Sex and Family	3	5, 7
SOC 1104	Introduction to Sociology	3	5
	Social Problems in a		
SOC 1106	Changing World	3	5, 8
SOC 1109	Wealth and Poverty	3	5, 7
	Sociology of Sex and		
SOC 1115	Gender Roles	3	5, 7
SOC 1116	Popular Culture and Media Sociology	3	5, 9
	Introduction to Women's		
SOC 1120	Studies and Gender Studies	3	5, 9
SOC 1121	Women Across Cultures	3	5, 8
SOC 2108	Social Psychology	3	5, 7
SOC 2110	American Minority Relations	3	5, 7
SOC 2112	Criminology	3	5
SOC 2114	Families in Crisis	3	5, 7
SOC 2125	Social Deviance	3	5, 9
WMST 1120	Introduction to Women's Studies and Gender Studies	3	5, 9
WMST 1121	Women Across Cultures	3	5, 8

GOAL AREA 6: HUMANITIES AND FINE ARTS - 2 COURSES

Select 2 courses from a minimum of 2 departments

Select 2 courses from a minimum of 2 departments			
			Goal
Course #	Course Title	Credits	Area
ART 1101	The Visual Arts	3	6, 8
ART 1102	Foundation Art History 1	3	6, 8
ART 1103	Foundation Art History 2	3	6, 8
ART 1104	Contemporary Art Survey	3	6, 8
ART 1105	Non-Western Art Survey	3	6, 8
ART 1109	Exploring Photography	3	6
	Introduction to Black and		
ART 1110	White Photography	3	6
ART 1113	Video Art	3	6
	Introduction to Digital		
ART 1114	Photography	3	6
	2D Animation and		
ART 1115	Interactivity	3	6
	Introduction to Graphic		
ART 1116	Design	3	6
	Foundation Two-		
ART 1118	Dimensional Design	3	6

			Goal
Course #	Course Title	Credits	Area
	Foundation Three-		
ART 1120	Dimensional Design	3	6
ART 1121	Foundation Drawing 1	3	6
711111111111111111111111111111111111111	Foundation of Digital		
ART 1122	Imaging	3	6
ART 1123	Introduction to Sculpture	3	6
7.11.1 2220	Introduction to Ceramics:		
ART 1124	Handbuilding	3	6
ART 1125	Glass Fusing 1	3	6
AITI IIIZO	Introduction to	3	U
ART 1126	Printmaking: Screenprint	3	6
ART 1127	Introduction to Painting	3	6
ART 1128	Watercolor Painting	3	6
ART 1120	Introduction to	3	0
ADT 1100		3	6
ART 1129	Printmaking	3	6
ADT 4400	Introduction to Ceramics:	2	
ART 1130	Wheel Throwing	3	6
ART 1132	Mixed Media	3	6
ART 2201	Figure Drawing	3	6
	Advanced Ceramics:	_	_
ART 2203	Handbuilding	3	6
ART 2204	Foundation Drawing 2	3	6
ART 2206	Glass Fusing 2	3	6
ART 2207	Advanced Photography	3	6
ART 2208	Advanced Painting	3	6
	Chinese Culture and		
CHIN 1111	Civilization	3	6, 8
CHIN 2100	Intermediate Chinese 1	5	6, 8
CHIN 2200	Intermediate Chinese 2	5	6, 8
COMM 1151	Storytelling	3	6
ENGL 1000	Introduction to Literature	3	6
ENGL 1120	Graphic Novels	3	6
ENGL 1130	Literature of Diversity	3	6, 7
ENGL 1140	Gender and Literature	3	6
ENGL 1170	Modern World Literature	3	6, 8
ENGL 1175	Myths and Legends	3	6, 8
ENGL 1186	Introduction to Poetry	3	6
	Introduction to Short		
ENGL 1188	Stories	3	6
ENGL 1189	Introduction to the Novel	3	6
	Children's and Young Adult		
ENGL 2060	Literature	3	6
ENGL 2120	Shakespeare	3	6
ENGL 2125	The Novels of Jane Austen	3	6
	Sherlock Holmes and the		
ENGL 2127	Victorian Age	3	6
	African American		
ENGL 2130	Literature	3	6, 7
ENGL 2133	Native American Literature	3	6, 7
ENGL 2150	American Literature 1	4	6, 9
LINGL ZIJU	American Literature 1	-	J, J

			Goal
Course #	Course Title	Credits	Area
ENGL 2151	American Literature 2	4	6, 9
ENGL 2160	British Writers 1	4	6
ENGL 2161	British Writers 2	4	6
ENGL 2174	African Literature	3	6, 8
	Introduction to Creative		
ENGW 1111	Writing	3	6
ENGW 2112	Poetry Writing	3	6
ENGW 2113	Fiction Writing	3	6
ENGW 2114	Play and Screen Writing	3	6
	Memoir/Non-Fiction		
ENGW 2115	Writing	3	6
	French Culture and		
FREN 1111	Civilization	3	6, 8
FREN 2100	Intermediate French 1	5	6, 8
FREN 2200	Intermediate French 2	5	6, 8
	German Culture and		
GERM 1111	Civilization	3	6, 8
GERM 2100	Intermediate German 1	5	6, 8
GERM 2200	Intermediate German 2	5	6, 8
	Japanese Culture and		
JAPN 1111	Civilization	3	6, 8
JAPN 2100	Intermediate Japanese 1	5	6, 8
JAPN 2200	Intermediate Japanese 2	5	6, 8
MUSC 1120	Fundamentals of Music	3	6
	Introduction to World		
MUSC 1121	Music	3	6, 8
MUSC 1122	Introduction to Music	3	6
MUSC 1123	Jazz History	3	6, 7
MUSC 1124	Rock and Roll History	3	6, 7
MUSC 1131	Music Theory 1	3	6
MUSC 1132	Music Theory 2	3	6
MUSC 2231	Music Theory 3	3	6
MUSC 2232	Music Theory 4	3	6
MUSC 2245	Music History 1	3	6, 8
MUSC 2246	Music History 2	3	6, 8
PHIL 1101	Introduction to Philosophy	3	6
PHIL 1103	Ethics	3	6, 9
PHIL 1105	Philosophy of Religion	3	6, 8
	Introduction to World		
PHIL 1150	Religions	3	6, 8
PHIL 1160	Philosophy of Art	3	6
PHIL 1170	Business Ethics	3	6, 9
PHIL 1180	Biomedical Ethics	3	6, 9
PHIL 1190	Ethics for the Digital Age	3	6, 9
	Somali Culture and		
SMLI 1111	Civilization	3	6, 8
SMLI 2100	Intermediate Somali 1	5	6, 8
SMLI 2200	Intermediate Somali 2	5	6, 8
	Spanish Culture and		,
SPAN 1111	Civilization	3	6, 8
<u> </u>	1		

			Goal
Course #	Course Title	Credits	Area
SPAN 2100	Intermediate Spanish 1	5	6, 8
SPAN 2200	Intermediate Spanish 2	5	6, 8
THTR 1111	Introduction to Cinema	3	6, 7
THTR 1116	Introduction to Theatre	3	6
	Introduction to Television		
THTR 1117	and Digital Media	3	6, 7
THTR 1118	Theatre in the Twin Cities	3	6, 7
THTR 1118	Theatre in the Twin Cities	3	6, 7
THTR 1125	Drawing and Rendering	3	6
	Introduction to Stage		
THTR 1130	Costumes	3	6
THTR 1140	Introduction to Stagecraft	3	6
THTR 1145	Lighting and Sound	3	6
THTR 1151	Acting 1	3	6
THTR 2020	Basic Design for the Stage	3	6
THTR 2111	World Cinema	3	6, 8
THTR 2150	Script Analysis	3	6
THTR 2151	Acting 2	3	6
THTR 2160	Audition Techniques	3	6
THTR 2520	Stage Management	3	6
THTR 2550	Directing 1	3	6

GOAL AREA 7: HUMAN DIVERSITY - 1 COURSE

			Goal
Course #	Course Title	Credits	Area
	Introduction to Forensic		
ANTH 1145	Anthropology	3	5, 7
ANTH 1150	Native American Voices	3	5, 7
BIOL 1125	Sex and Human Diversity	3	3, 7
	Intercultural		
COMM 1131	Communication	3	7, 8
COMM 1141	Nonverbal Communication	3	7
ENGL 1130	Literature of Diversity	3	6, 7
	African American		
ENGL 2130	Literature	3	6, 7
ENGL 2133	Native American Literature	3	6, 7
	Geography of the US and		
GEOG 1125	Canada	3	7, 10
GEOG 1170	Cities	3	7, 9
HIST 1111	United States History 1	4	5, 7
HIST 1112	United States History 2	4	5, 7
	Lesbian, Gay, Bisexual,		
	and Transgender U.S.		
HIST 2111	History	3	5, 7
MUSC 1123	Jazz History	3	6, 7
MUSC 1124	Rock and Roll History	3	6, 7
POLS 1195	Conflict and Negotiation	3	5, 7
	Psychology of Death and		
PSYC 1108	Dying	3	7, 9

			Goal
Course #	Course Title	Credits	Area
PSYC 1140	Psychology of Gender	3	5, 7
	Psychology of Adulthood		
PSYC 1220	and Aging	3	5, 7
	Psychology of Adulthood		
PSYC 1220	and Aging	3	5, 7
PSYC 2200	Abnormal Psychology	3	5, 7
	Developmental		
PSYC 2210	Psychology: Life Span	4	5, 7
	Psychology of Religion and		
PSYC 2400	Spirituality	3	5, 7
	Introduction to Social		
PSYC 2600	Psychology	3	5, 7
	Modern US Society:		
	Everyday Life in the United		
SOC 1100	States of America	3	5, 7
SOC 1102	Love, Sex and Family	3	5, 7
	Social Change in Action		
SOC 1103	and Service Learning	3	7, 9
SOC 1109	Wealth and Poverty	3	5, 7
	Sociology of Sex and		
SOC 1115	Gender Roles	3	5, 7
SOC 2108	Social Psychology	3	5, 7
	American Minority		
SOC 2110	Relations	3	5, 7
SOC 2114	Families in Crisis	3	5, 7
THTR 1111	Introduction to Cinema	3	6, 7
	Introduction to Television		
THTR 1117	and Digital Media	3	6, 7
THTR 1118	Theatre in the Twin Cities	3	6, 7

GOAL AREA 8: GLOBAL PERSPECTIVE - 1 COURSE

GOAL AIRLA O. C	ILUBAL PERSPECTIVE - I COURSE		
			Goal
Course #	Course Title	Credits	Area
	Introduction to		
	Anthropology- What it		
ANTH 1100	Means to be Human	3	5, 8
ANTH 1101	Cultural Diversity	3	5, 8
ANTH 1121	Women Across Cultures	3	5, 8
	Cultural Anthropology-The		
ANTH 1127	Global Human Experience	3	5, 8
	Seeing Culture Through		
ANTH 1148	Film and Fieldwork	3	5, 8
	Magic, Witchcraft and		
	Religion: The Anthropology		
ANTH 1188	of Religion	3	5, 8
	Medical Anthropology:		
	Health, Illness and Healing		
ANTH 1899	Across Cultures	3	5, 8
ART 1101	The Visual Arts	3	6, 8
ART 1102	Foundation Art History 1	3	6, 8

			Cool
Course #	Course Title	Credits	Goal Area
ART 1103	Foundation Art History 2	3	6, 8
ART 1104	Contemporary Art Survey	3	6, 8
ART 1105	Non-Western Art Survey	3	6, 8
7.111 2230	Introduction to Emerging		0, 0
BIOL 1103*	Diseases	4	3, 8
CHIN 1100	Beginning Chinese 1	5	8
	Chinese Culture and		
CHIN 1111	Civilization	3	6, 8
CHIN 1200	Beginning Chinese 2	5	8
CHIN 2100	Intermediate Chinese 1	5	6, 8
CHIN 2200	Intermediate Chinese 2	5	6, 8
011111 2200	Intercultural		0, 0
COMM 1131	Communication	3	7, 8
	Principles of		., .
ECON 2202	Macroeconomics	3	5, 8
ENGL 1170	Modern World Literature	3	6, 8
ENGL 1175	Myths and Legends	3	6, 8
ENGL 2174	African Literature	3	6, 8
FREN 1100	Beginning French 1	5	8
TIVEN TIOO	French Culture and	3	0
FREN 1111	Civilization	3	6, 8
FREN 1200	Beginning French 2	5	8
FREN 2100	Intermediate French 1	5	6, 8
FREN 2200	Intermediate French 2	5	6, 8
1 IVEN 2200	Introduction to Maps &	3	0, 0
GEOG 1050	Places	3	5, 8
GEOG 1102	Human Geography	3	5, 8
GEOG 1102	World Regional Geography	3	5, 8
GEOG 1121	Geography of Latin	3	5, 6
GEOG 1124	America	3	5, 8
GLOG 1124	Climate Change: Science,	3	3, 8
	Human Impacts and		
GEOG 1130	Adaptations	3	3,8
aloa 1130	Climate Change: Science,	3	3,0
	Human Impacts and		
GEOL 1130	Adaptations	3	3,8
GERM 1100	Beginning German 1	5	8
3211111 1100	German Culture and		
GERM 1111	Civilization	3	6, 8
GERM 1200	Beginning German 2	5	8
GERM 2100	Intermediate German 1	5	6, 8
GERM 2200	Intermediate German 2	5	6, 8
GLINIVI ZZUU	History of World	J	0, 0
HIST 1101	Civilizations 1	4	5, 8
11121 1101	History of World	4	5, 6
HIST 1100	Civilizations 2	4	5 0
HIST 1102		4	5, 8
	Family: Sex/Gender/Power: A		
LICT 1121	Cross-Cultural, Historical	2	E 0
HIST 1131	Perspective	3	5, 8

			Goal
Course #	Course Title	Credits	Area
HIST 2101	History of East Asia	3	5, 8
11101 2101	Latin American History-Pre-	3	5, 6
HIST 2102	Conquest to the Present	3	5, 8
11131 2102	World in the Era of the	3	5, 6
HIST 2201	World Wars	3	E 0
JAPN 1100		5	5, 8 8
JAPN 1100	Beginning Japanese 1	3	0
JAPN 1111	Japanese Culture and Civilization	3	6.0
		5	6, 8 8
JAPN 1200	Beginning Japanese 2		
JAPN 2100	Intermediate Japanese 1	5	6, 8
JAPN 2200	Intermediate Japanese 2	5	6, 8
MUSC 1121	Introduction to World Music	3	6, 8
MUSC 2245	Music History 1	3	6, 8
MUSC 2246	Music History 2	3	6, 8
PHIL 1105	Philosophy of Religion	3	6, 8
	Introduction to World		
PHIL 1150	Religions	3	6, 8
	Introduction to		
POLS 1132	Comparative Politics	3	5, 8
POLS 1133	Middle East Politics	3	5, 8
	Introduction to World		
POLS 1150	Politics and Globalization	3	5, 8
SMLI 1100	Beginning Somali 1	5	8
	Somali Culture and		
SMLI 1111	Civilization	3	6, 8
SMLI 1200	Beginning Somali 2	5	8
SMLI 2100	Intermediate Somali 1	5	6,8
SMLI 2200	Intermediate Somali 2	5	6,8
SOC 1101	Cultural Diversity	3	5, 8
	Social Problems in a		
SOC 1106	Changing World	3	5, 8
SOC 1121	Women Across Cultures	3	5, 8
SPAN 1100	Beginning Spanish 1	5	8
	Spanish Culture and		
SPAN 1111	Civilization	3	6, 8
SPAN 1200	Beginning Spanish 2	5	8
SPAN 2100	Intermediate Spanish 1	5	6, 8
SPAN 2200	Intermediate Spanish 2	5	6, 8
THTR 2111	World Cinema	3	6, 8
WMST 1121	Women Across Cultures	3	5, 8

GOAL AREA 9: ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE

			Goal
Course #	Course Title	Credits	Area
	Introduction to Women's		
ANTH 1120	Studies and Gender Studies	3	5, 9
	Field Archaeology-Methods		
ANTH 1235	of Exploring the Past	3	5, 9
COMM 1106	Mass Media	3	5, 9

			Goal
Course #	Course Title	Credits	Area
	Strategic Communication:		
	Advertising and Public		
COMM 1113	Relations	3	9
ECON 1100	Personal Finance	3	9
ECON 1200	Consumer Economics	3	5, 9
ECON 1400	Survey of Economics	3	5, 9
	Principles of		
ECON 2201	Microeconomics	3	5, 9
	Business and Technical		
ENGC 2102	Writing	3	9
ENGL 2150	American Literature 1	4	6, 9
ENGL 2151	American Literature 2	4	6, 9
GEOG 1170	Cities	3	7, 9
GEOL 1050*	Earth History	4	3, 9
	Leadership Development		
INDS 1600	Studies	3	9
PHIL 1103	Ethics	3	6, 9
PHIL 1140	Environmental Ethics	3	9, 10
PHIL 1170	Business Ethics	3	6, 9
PHIL 1180	Biomedical Ethics	3	6, 9
PHIL 1190	Ethics for the Digital Age	3	6, 9
	Energy, Climate & Physics in		0, 0
PHYS 1001	Society	3	3, 9
PHYS	Energy, Climate & Physics in		0, 0
1001+1002	Society + Energy, Climate &		
*	Physics in Society Lab	4	3, 9
POLS 1130	Introduction to U.S. Politics	3	5, 9
1 020 1200	Introduction to Political		0, 0
POLS 1135	Ideas	3	5, 9
POLS 1152	Model United Nations	3	5, 9
POLS 2250	Constitutional Law	3	5, 9
1 010 2200	Psychology of Death and	3	5, 5
PSYC 1108	Dying	3	7, 9
1310 1100	Social Change in Action and	3	1, 3
SOC 1103	Service Learning	3	7, 9
300 1103	Popular Culture and Media	3	1, 5
SOC 1116	Sociology	3	5, 9
300 1110	Introduction to Women's	3	5, 9
SOC 1120	Studies and Gender Studies	3	5, 9
SOC 1120 SOC 2125		3	
300 2125	Social Deviance	3	5, 9
200 2120	Introduction to Criminal	2	
SOC 2130	Justice	3	9
WINDER 4400	Introduction to Women's	2	F 0
WMST 1120	Studies and Gender Studies	3	5, 9

GOAL AREA 10: PEOPLE AND THE ENVIRONMENT - 1 COURSE

			Goal
Course #	Course Title	Credits	Area
	Human Evolution-An		
	Introduction to Bio-		
ANTH 1210	Anthropology	4	5, 10
	Archaeology-Prehistory		
	and Humanity's Cultural		
ANTH 1230	Origins	4	5, 10
	Archaeology of Minnesota-		
	Prehistoric Native		
ANTH 1236	Cultures	3	5, 10
	MN Natural History and		
BIOL 1104*	Field Biology	4	3, 10
BIOL 1110	Environmental Biology	3	3, 10
BIOL 2206*	Ecology	4	3, 10
CHEM 1010*	Environmental Chemistry	4	3, 10
	Earth's Natural		
GEOG 1101*	Environments	4	3, 10
	Resources, Society and		
GEOG 1104	Environment	3	5, 10
GEOG 1123	Geography of Minnesota	3	5, 10
	Geography of the US and		
GEOG 1125	Canada	3	7, 10
GEOG 1172*	Introductory Meteorology	4	3, 10
GEOL 1101*	The Dynamic Earth	4	3, 10
GEOL 1110	Environmental Geology	3	3, 10
	Environmental Geology +		
GEOL	Environmental Geology		
1110+1111*	Lab	4	3, 10
GEOL 1120	Oceanography	3	3, 10
HIST 1133	Minnesota History	3	5, 10
PHIL 1140	Environmental Ethics	3	9, 10



Associate of Arts (AA) in Liberal Education 60 Credits

This degree is intended to satisfy the first two years of a baccalaureate degree program. Transferability of courses from Normandale Community College to other higher education systems in Minnesota is enhanced by transfer agreements that are in place. For assistance in program planning, or to explore additional transfer options, students should schedule a time to meet with an academic advisor or counselor.

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC	course listing.
GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121
GOAL 2:	CRITICAL THINKING (Met by completion of all 40 credits of the MnTC)
GOAL 3: (Select from include a la	two different departments; at least one must
	□ Course #1
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select from	two different departments) Course #1 Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES a two different departments) □ Course #1 □ Course #2
GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course
GOAL 8:	GLOBAL PERSPECTIVE – 1 COURSE □ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE Course

Additional Course Requirements - 20 Credits

- ☐ One Health (HLTH) course.
- ☐ One Exercise Science (EXSC) course.
- ☐ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

I	As	sociate of Arts in Liberal Education (AA)			
	needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.				
		Fall Semester	Spring Semester		
	1st year	ENGC 1101	MNTC Goal 4		
		Fall Semester	Spring Semester		
	2nd year	*MNTC Goal 3			
		*For MNTC Goal areas that require 2 courses, they must come from 2 different departments			



Accounting Transfer Pathway (AS) 60 Credits

The Accounting Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated accounting bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Core Courses - 30 Credits

□ ACCT 1052	Computerized Accounting	2 cr
□ ACCT 2251	Financial Accounting	4 cr
□ ACCT 2252	Managerial Accounting	4 cr
□ ACCT 2254	Introduction to Management	4 cr
	Information Systems	
□ ACCT 2853	Federal Individual Income Tax	4 cr
□ BUSN 1201	Information Technology	3 cr
	Concepts and Business	
	Software 1	
□ BUSN 2155	Legal Environment of Business	3 cr
□ BUSN 2300	Principles of Management	3 cr
□ BUSN 2400	Principles of Marketing	3 cr

□ BO2N 5122	Legal Environment of Business	3 cr
□ BUSN 2300	Principles of Management	3 cr
□ BUSN 2400	Principles of Marketing	3 cr
Additional Re	equired Courses - 30 Credits	
□ ENGC 1101	College Writing	4 cr
□ MATH 1100	College Algebra	4 cr
	or any higher numbered MATH	
	course for which MATH 1100 is a	
	prerequisite	
□ ECON 2201	Principles of Microeconomics	3 cr
□ ECON 2202	Principles of Macroeconomics	3 cr
Complete one of	the following three courses:	
□ COMM 1101	Fundamentals of Public	3 cr
	Speaking	
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
Complete one of	the following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
□ One course from	m MnTC Goal 3 (with traditional lab)	4 cr

□ Complete additional MnTC courses to reach 30 credits 5 cr

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Following degree completion, successful transfer to Minnesota State universities includes meeting the admission requirements for those individual universities and their related academic program.

Accounting Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1100 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.			
	Fall Semester	Spring Semester	
1st year	ENGC 1101	ACCT 2251	
	Fall Semester	Spring Semester	
2nd year	ACCT 2252	ACCT 1052	



Accounting Certificate 17 Credits

The Accounting Certificate is designed for working adults who need to acquire additional technical accounting skills. The Accounting Certificate offers core accounting courses that prepare students for entry-level accounting jobs.

The Financial Accounting course emphasizes recording business transactions and providing reports to users. The Managerial Accounting course deals with gathering vital information for managers to use in operating the business. Federal Individual Income Tax trains students to prepare a basic tax return. The Computerized Accounting and Information Technology Concepts/Business Software I courses provide experience with industry software that streamlines the accounting process.

Students transferring to non-system universities are advised to consult with their intended transfer institution to determine transferability of the courses in this curriculum.

Required Courses - 17 Credits

□ ACCT 1052	Computerized Accounting	2 cr
□ ACCT/BUSN	Federal Individual Income Tax	4 cr
2853		
□ ACCT 2251	Financial Accounting	4 cr
□ ACCT 2252	Managerial Accounting	4 cr
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Anthropology - Associate of Arts Emphasis (AA) 60 Credits

The Anthropology Department explores human nature and culture very broadly and comparatively. Our courses foster a biocultural understanding of humans from materially simple to complex cultures from the distant past to the present.

The Associate of Arts degree with Emphasis in Anthropology provides a solid foundation for an undergraduate major or for study in related disciplines as well as powerful tools for making one's way in a changing world.

Required Co		o vo l	GOAL 4:	MATHEMATICAL/LOGICAL RE
	following Required Courses into the General nesota Transfer Curriculum or Additional	erai		□ Course
•	ments sections below.			
□ ANTH 1127	Cultural Anthropology - The Global	3 cr	GOAL 5:	HISTORY AND SOCIAL/BEHA 2 COURSES
	Human Experience		(Select fro	m two different departments)
□ ANTH 1210	Human Evolution - An Introduction to Bio-Anthropology	4 cr		□ Course #1 met by required□ Course #2
□ ANTH 1230	Archaeology - Prehistory and	4 cr		
	Humanity's Cultural Origins		GOAL 6:	HUMANITIES AND FINE ARTS
0	at an a of the fellowing vine accuracy		(Select fro	m two different departments)
•	st one of the following nine courses:	2		□ Course #1
□ ANTH/SOC 1101	Cultural Diversity	3 cr		□ Course #2
□ ANTH/SOC/ WMST 1121	Women Across Cultures	3 cr	GOAL 7:	HUMAN DIVERSITY - 1 COUF □ Course
□ ANTH 1145	Introduction to Forensic	3 cr		(can be met by taking ANTI
	Anthropology		GOAL 8:	GLOBAL PERSPECTIVE - 1 C
□ ANTH 1148	Seeing Culture Through Film and Fieldwork	3 cr	GOAL 6.	□ Course met by taking requ
□ ANTH 1150	Native American Voices	3 cr	GOAL 9:	ETHICAL AND CIVIC RESPON
□ ANTH 1188	Magic, Witchcraft and Religion: The	3 cr		□ Course
L ANTITIES	Anthropology of Religion	3 (1		(can be met by taking ANT
□ ANTH 1235	Field Archeology - Methods of Exploring the Past	3 cr	GOAL 10:	PEOPLE AND THE ENVIRONM
□ ANTH 1236	Archaeology of Minnesota -	3 cr		Course met by taking require
1 ANTIT 1250	Prehistoric Native Cultures	3 01	۸ ططانه: م.	nal Caursa Baguiramar
□ ANTH 1899	Medical Anthropology: Health,	3 cr		nal Course Requiremer alth (HLTH) course.
□ ANTIT 1099	Illness and Healing Across Cultures	3 (1	□ One Exe	ercise Science (EXSC) course. • credits – additional course(s)
	cation/Minnesota Transfer		above, i	f needed to complete the 60 c

Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121
	CRITICAL THINKING npletion of all 40 credits of the MnTC)
GOAL 3: (Select from	n two different departments; at least one must

□ Course #1 _____ □ Course #2 _____

	1 COURSE
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select from	n two different departments) □ Course #1 met by required ANTH courses □ Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES two different departments) Course #1 Course #2
GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course (can be met by taking ANTH 1145 or 1150)
GOAL 8:	GLOBAL PERSPECTIVE – 1 COURSE □ Course met by taking required ANTH courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course (can be met by taking ANTH 1235)
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE Course met by taking required ANTH courses
	al Course Requirements – 20 Credits lth (HLTH) course.

MATHEMATICAL/LOGICAL REASONING -

Elective credits - additional course(s) numbered 1000 and

above, if needed to complete the 60 credit requirement.

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.



This degree will provide the student with a sound foundation in courses which are commonly the core of baccalaureate programs in applied mathematics, and will enable the student to transfer to the Bachelor in Applied Mathematics degree program at Metropolitan State University.

Required Courses - 37 Credits

□ CSCI 1101	Introduction to Computing and	4 cr
	Problem Solving	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1500	Pre-Calculus	5 cr
□ MATH 1510	Calculus 1	5 cr
□ MATH 1520	Calculus 2	5 cr
□ MATH 2400	Probability and Statistics with	4 cr
	Calculus	
□ MATH 2510	Calculus 3: Multivariable	5 cr
	Calculus	
□ MATH 2520	Calculus 4: Differential	5 cr
	Equations with Linear Algebra	

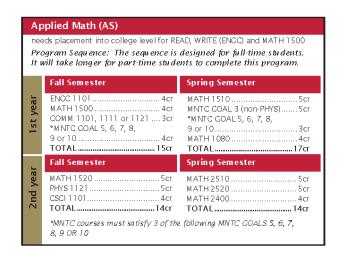
Additional Required Courses - 23 Credits

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

□ ENGC 1101	College Writing	4 cr		
□ PHYS 1121	Physics 1 for Scientists and	5 cr		
	Engineers			
Complete one of	the following three courses			
□ COMM 1101	Fundamentals of Public	3 cr		
	Speaking			
□ COMM 1111	Interpersonal Communication	3 cr		
□ COMM 1121	Small Group Communication	3 cr		
□ One course from MnTC Goal 3 (Choose a non-				
PHYS course)		3-5 cr		
□ Complete additional MnTC courses to satisfy 3 of				
the following M	nTC goals: 5, 6, 7, 8, 9, or 10.			
(Students should	d check with their transfer institution			
for specific requ	uirements.)	6-8 cr		

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.





Field Archaeology Certificate 18 Credits

Archaeology explores the vanished cultures of the past through recovery and scientific analysis of physical evidence found at ancient sites. Our courses foster a bio-cultural understanding of societies, from materially simple to complex cultures and from the distant past to historical times. The Certificate in Field Archaeology provides a solid foundation in archaeology and it introduces the tools and hands-on skills for participation in field research and cultural resource management.

Required Courses - 18 Credits

□ ANTH 1100	Introduction to Anthropology	4 cr
	-What it Means to be Human	
□ ANTH 1230	Archaeology - Prehistory and	4 cr
	Humanity's Cultural Origins	
□ ANTH 1235	Field Archeology - Methods	3 cr
	of Exploring the Past	
□ ANTH 1236	Archaeology of Minnesota -	3 cr
	Prehistoric Native Cultures	

Complete one of the following three courses:

□ GEOL 1110/	Environmental Geology	3 cr
1111	And Laboratory	1 cr
□ GEOL 1101	The Dynamic Earth	4 cr
□ GEOG 1101	Earth's Natural Environments	4 cr

Note: GEOL 1110 must be taken with its lab GEOL 1111 for a total of 4 credits.

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Archaeology - Associate of Arts Emphasis (AA) 60 Credits

Archaeology explores the vanished cultures of the past through recovery and scientific analysis of physical evidence found at ancient sites. Our courses foster a bio-cultural understanding of societies; from the materially simple to complex cultures, and from the distant past to historic times.

The Associate of Arts with Emphasis in Archaeology provides a solid foundation for an undergraduate major or for study in related disciplines, and it introduces tools and hands-on skills for participating in field research and cultural resource management.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional

Course Requirements sections below.

□ ANTH 1100	Introduction to Anthropology -What it	4 cr
	Means to be Human	
□ ANTH 1230	Archaeology - Prehistory and	4 cr
	Humanity's Cultural Origins	
□ ANTH 1235	Field Archeology - Methods of	3 cr
	Exploring the Past	
□ ANTH 1236	Archaeology of Minnesota -	3 cr
	Prehistoric Native Cultures	

Complete one of the following three courses:

□ GEOL 1110/	Environmental Geology	3 cr
1111	And Laboratory	1 cr
□ GEOL 1101	The Dynamic Earth	4 cr
□ GEOG 1101	Earth's Natural Environments	4 cr

Note: GEOL 1110 must be taken with its lab GEOL 1111 for a total of 4 credits.

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES
	□ ENGC 1101

□ COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING (met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must include a lab)

Course #1 met by taking required GEOL or
GEOG course
□ Course #2

GOAL 4: MATHEMATICAL/LOGICAL REASONING -

1 COURSE	
□ Course	

GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select from	n two different departments) □ Course #1 met by taking required ANTH courses □ Course #2
	HUMANITIES AND FINE ARTS - 2 COURSES a two different departments) □ Course #1 □ Course #2
GOAL 7:	HUMAN DIVERSITY - 1 COURSE Course met by taking required ANTH courses
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course (can be met by taking ANTH 1127)
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY – 1 COURSE Course met by taking required ANTH courses
GOAL 10:	PEOPLE AND THE ENVIRONMENT – 1 COURSE □ Course met by taking required ANTH courses

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- $\hfill\Box$ Earn a minimum of 15 college-level credits at Normandale.



Art Transfer Pathway (AFA) 60 Credits

The Art Transfer Pathway AFA (Associate of Fine Arts in Art) is a pre-professional degree intended for students transferring to a four-year program or those with a strong interest in visual art. The AFA in Art is designed to encourage students to focus their coursework to achieve an associate degree that distinguishes their accomplishments in art.

The Art Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated art bachelor's degree programs at Minnesota State universities.

*The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

*Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University; Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Core Courses - 40 Credits

□ ART 1102	Foundation Art History 1	3 cr
□ ART 1103	Foundation Art History 2	3 cr
□ ART 1121	Foundation Drawing 1	3 cr
□ ART 1118	Foundation Two-Dimensional Design	3 cr
□ ART 1120	Foundation Three-Dimensional Design	3 cr
□ ART 1122	Foundation Digital Imaging	3 cr
□ ART 2200	AFA in Art Capstone: Portfolio and Professional Practices	3 cr
□ ART 2210	AFA in Art Capstone: Exhibition	1 cr

- ART 2200: Complete ART 2200 Portfolio and Professional Practices (grade C or higher) after completing ART 1121, ART 1118, ART 1122.
- ART 2210: Complete ART 2210 AFA in Art Capstone:
 Exhibition (grade C or higher) after completing ART 2200
 and 10 or fewer ART credits remaining to complete degree.

Complete **four** courses, including a minimum of one course from each of the following categories:

Two-dimensional courses:

□ ART 1110	Introduction to Film	3 cr
	Photography	
□ ART 1114	Introduction to Digital	3 cr
	Photography	
□ ART 1116	Introduction to Graphic Design	3 cr
□ ART 1126	Introduction to Printmaking:	3 cr
	Screenprint	
□ ART 1127	Introduction to Painting	3 cr
□ ART 1129	Introduction to Printmaking:	3 cr
	Relief	
□ ART 2204	Foundation Drawing 2	3 cr

Three-dimensional courses:

□ ART 1123	Introduction to Sculpture	3 cr
□ ART 1124	Introduction to Ceramics:	3 cr
	Handbuilding	
□ ART 1130	Introduction to Ceramics: Wheel	3 cr
	Throwing	

Complete remaining required electives (6 credits) from above (two-dimensional or three-dimensional) or from the following:

□ ART 1113	Video Art	3 cr
□ ART 1115	2D Animation and Interactivity	3 cr
□ ART 1125	Glass Fusing 1	3 cr
□ ART 1128	Watercolor Painting	3 cr
□ ART 1132	Mixed Media	3 cr
□ ART 2201	Figure Drawing	3 cr
□ ART 2206	Glass Fusing 2	3 cr
□ ART 2207	Advanced Photography	3 cr
□ ART 2208	Advanced Painting	3 cr

Additional Course Requirements - 20 Credits

□ ENGC 1101	College Writing	4 cr
Complete one of	the following courses:	
□ COMM 1100	Introduction to Communication	3 cr
□ COMM 1101	Fundamentals of Public	3 cr
	Speaking	
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
•	nimum of 13 credits from three of the Goal Areas: 3, 5, 7, 9, or 10.	13 cr



Art Transfer Pathway (AFA), continued 60 Credits

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 3.0 in ART courses.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Admission to the Program is a Two-Step Process:

Application and Portfolio: Complete and submit the AFA in Art application form below and a digital portfolio of artwork (4 pieces) to the AFA in Art Coordinator, Brian Mack (brian.mack@normandale.edu / F2245 / 952-358-8592). The AFA in Art application can be found at the AFA & AA in Art Major's bulletin board or online at www.normandale.edu/artafa.

Use the Preparation of a Portfolio on page 2 for specific requirements for submitting a digital portfolio of artwork. Completed application and artwork will be reviewed by Art Department faculty.

Interview with AFA in Art Coordinator: After the application is reviewed, the AFA coordinator will schedule an interview to discuss the application and review the degree requirements.

Art Transfer Pathway (AFA) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Spring Semester ART 11023cr ART 11033cr ART 11183cr ART 11203cr ART 11213cr ART 11223cr ENGC 1101 *ART (2D)3cr COMM 1100, 1101, 1111 MNTC Goal 3, 5, 7, 9 or 104cr or 11213cr TOTAL ... **Fall Semester** Spring Semester ART 22003cr ART 22101cr *ART (3D)3cr *ART (2D or 3D)......3cr *ART (2D or 3D)......3cr *ART elective3cr MNTC Goal 3, 5, 7, 9 or 10 3cr *ART elective3cr MNTC Goal 3, 5, 7, 9 or 10 3cr MNTC Goal 3, 5, 7, 9 or 10 3cr TOTAL ... *See catalog for course choices



Required Courses

Art – Associate of Arts Emphasis (AA) 60 Credits

The Associate of Arts (AA) with Emphasis in Art is a liberal education degree with a concentration in visual art courses. It is intended for transfer to a BA four-year program. Students seeking an Associate of Arts (AA) degree with Emphasis in Art must successfully complete the AA requirements and the specific Art Emphasis requirements. This degree is designed for students who seek a general liberal arts degree with an art emphasis. The degree provides a sound art history and art studio foundation and satisfies the complete MnTC.

cr cr cr

cr

cr

•	Vinnesota Transfer Curriculum or Additional	
□ ART 1102	uirements sections below. Foundation Art History 1	3
□ ART 1103	Foundation Art History 2	3
□ ART 1118	Foundation Two-Dimensional	3
= /(((111)	Design	Ŭ
□ ART 1120	S .	3
□ ART 1121	S	3
	t least 2 additional art courses for 6 credits tota RT 1101 The Visual Arts: □ Course #1 □ Course #2	al,
Curriculu	Education/Minnesota Transfer um (MnTC) - 40 Credits course listings.	
GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121	
GOAL 2: (met by com	CRITICAL THINKING npletion of all 40 credits of the MnTC)	
□ GOAL 3: (Select from include a la	two different departments; at least one must	
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE Course	
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES 2 COURSES	i -
(Select from	two different departments) Course #1 Course #2	
GOAL 6: (Select from	HUMANITIES AND FINE ARTS- 2 COURSES a two different departments) Course #1 met by taking required ART cours Course #2	es
GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course	

Incorporate the following Required Courses into the General

GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course met by taking required ART courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- ☐ One Exercise Science (EXSC) course.
- Elective credits additional course(s) numbered
 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Ar	t Emphasis (AA)			
Pro	needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.			
	Fall Semester	Spring Semester		
1st year	ENGC 1101	ART 1103		
	Fall Semester	Spring Semester		
2nd year	ART 1120	ART elective (not ART 1101)3cr *MNTC Goal 3 with lab4cr MNTC Goal 93cr MNTC Goal 103cr EXSC electives1cr TOTAL14cr		
	*For MNTC Goal areas that require . 2 different departments	2 courses, they must come from		

Biology Transfer Pathway (AS) 60 Credits

The Biology Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated biology bachelor's degree programs at Minnesota State universities.

* The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

*Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University

Core Courses - 17 Credits

Each of the following courses must be completed with a grade of C or higher:

□ BIOL 1501	Principles of Biology 1	5 cr
□ BIOL 1502	Principles of Biology 2	4 cr
□ BIOL 2205	Genetics	4 cr

Complete **one** of the following three courses:

□ BIOL 2206	Ecology	4 cr
□ BIOL 2207	Cell Biology	4 cr
□ BIOL 2208	Biology of Microorganisms	4 cr

Additional Required Courses – 43 Credits

□ ENGC 1101	College Writing	4 cr
□ CHEM 1061	Principles of Chemistry 1	5 cr
□ CHEM 1062	Principles of Chemistry 2	5 cr

Complete **one** of the following two courses:

□ COMM 1101	Fundamentals of Public	3 cr
	Speaking	
□ COMM 1111	Interpersonal Communication	3 cr

Complete **two** of the following four (or higher level) courses depending on specific major track and transfer university:

depending on specific major track and transfer university:				
□ MATH 1100	College Algebra	4 cr		
□ MATH 1150	Trigonometry	4 cr		
□ MATH 1500	Pre-Calculus	5 cr		
□ MATH 1510	Calculus 1	5 cr		
□ Complete one course from MnTC Goal 5				
□ Complete one course from MnTC Goal 6 3-				
□ Complete one course from MnTC Goal 7, 8, 9 or 10 With careful planning, courses used to satisfy Goals 5 and 6 may also be counted for Goals 7, 8, 9 or 10.				

□ Complete additional courses to reach 60 credits total.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Biology Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester **Spring Semester** ENGC 11014cr BIOL 1502.... BIOL 1501.....5cr MATH 1150, 1500 or 1510..4-5cr MATH 1100, 1150 or 1500 CHEM 10615cr (depending on placement) ... 4-5cr COMM 1101 or 11113cr 13-14cr **Fall Semester** Spring Semester *BIOL 2206 or 2208 (or BIOL 2205......4cr 2207-Spring only course) 4cr MNTC GOAL 7. 8. 9 or 10 3cr CHEM 1062......5cr Electives1-4cr MNTC GOAL 5......3cr MNTC GOAL 6......3cr Electives (if taken MATH 1100 & TOTAL 1150 for the math requirement).... 3cr TOTAL1 *Pick one from BIOL 2206, 2207 or 2208. If needed complete additional courses to reach 60 credits.



Business: Marketing and Management (AAS) 60 Credits

The Business: Marketing and Management AAS Degree is designed for individuals who wish to seek employment after graduation or who want to enhance their advancement opportunities with their current employers. The program offers a combination of general education and business classes that provide students with critical thinking and technical business skills. These skills are appropriate for positions in management, supervision, marketing, sales or small business management.

Normandale business programs are nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The Higher Learning Commission has extended Normandale's accreditation to include the online delivery of the Associate of Applied Science in Business: Marketing and Management.

Core Courses - 40 Credits

□ BUSN 1201/ Information Technology Concepts		3 cr	
CIM 1201	and Business Software 1		
□ BUSN 2096	Internship in Business	2-4 cr	
□ BUSN 2155	Legal Environment of Business	3 cr	
□ BUSN 2300	Principles of Management	3 cr	
□ BUSN 2400	Principles of Marketing	3 cr	
Complete one of the following two courses:			
□ ACCT 2251	Financial Accounting	4 cr	
□ ACCT 2252	Managerial Accounting	4 cr	

Complete 20-22 credits of additional BUSN courses to reach 40 credits of required coursework.

□ BUSN	
□ BUSN	
□ BUSN	
□ BUSN	
□ RUSN	

Note: The department recommends that students complete courses which, when combined with the required courses above, lead to the achievement of a marketable business certificate.

Additional Required Courses - 20 Credits

□ ENGC 1101	College Writing	4 cr	
□ ENGC 2102	Business and Technical Writing	3 cr	
Complete one of	the following three courses:		
□ COMM 1101	Fundamentals of Public Speaking	3 cr	
□ COMM 1111	Interpersonal Communication	3 cr	
□ COMM 1121	Small Group Communication	3 cr	
Complete one of the following two courses:			
□ ECON 2201	Principles of Microeconomics	3 cr	
□ ECON 2202	Principles of Macroeconomics	3 cr	
□ Complete 7 cre	edits of additional MNTC courses		
·			
to reach 20 credits			

Other Degree Requirements

- If needed, complete additional courses to reach 60 credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

nee Pro	siness: Marketing & Manage ds placement into college level for RE ogram Sequence: The sequence is vill take longer for part-time stude	AD and WRITE (ENGC) designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	BUSN 2300
	Fall Semester	Spring Semester
2nd year	ACCT 2251	BUSN 2096



Business Transfer Pathway (AS) 60 Credits

The Business Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated business bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Associate of Science in Business. Normandale's Business programs are nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

□ ACCT 2251 □ ACCT 2252 □ BUSN 1201/ □ CIM 1201	Financial Accounting Managerial Accounting Information Technology Concepts and Business Software 1	4 cr 4 cr 3 cr	Small Business □ BUSN 1125 □ BUSN 1220/ CIM 1220 □ BUSN 2310	Entrepreneurship Business Problem Solving Analyzing - Excel Small Business Management	3 cr 3 cr 3 cr
□ BUSN 2155	Legal Environment of Business	3 cr	Additional F	Required Courses – 30-32 Cro	edits
□ BUSN 2300	Principles of Management	3 cr	□ ENGC 1101	College Writing	4 cr
□ BUSN 2400	Principles of Marketing	3 cr	□ ECON 2201	Principles of Microeconomics	3 cr
	ree additional BUSN courses for 8-10 c	redits.	□ ECON 2202	Principles of Macroeconomics	3 cr
□ BUSN □ BUSN □ BUSN			Complete one or COMM 1101	f the following three courses: Fundamentals of Public Speaking	3 cr
The department	recommends that students complete of	ourees	□ COMM 1111	Interpersonal Communication	3 cr
•	mbined with the required courses above		□ COMM 1121	Small Group Communication	3 cr
	ent of a marketable business certificate			·	
	noose from the following certificates:	.			
Students may cr	loose from the following certificates.		□ MATH 1100	College Algebra	4 cr
Human Resourc	<u>es Management</u>			numbered MATH course for which	
□ BUSN 1145	Supervision	3 cr	MATH 1100 is	s a prerequisite	
□ BUSN 2100	Human Relations and Effective	3 cr		f the following three courses:	
DUON OCCO	Teams	2	□ MATH 1080	Introduction to Statistics	4 cr
□ BUSN 2200	Human Resource Management	3 cr	□ MATH 1090	STATWAY Statistics 2	4 cr
Management			□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
□ BUSN 1145	Supervision	3 cr	□ Complete one	course from MnTC Goal 3	
□ BUSN 1210	Exceptional Customer Service	3 cr	□ complete one	course from wiff o doar 5	
□ BUSN 2100	Human Relations and Effective	3 cr	□ Complete one	course from MnTC Goal 6	
3 200.1. 2200	Teams	3 3.	PHIL 1170 red	commended.	
<u>Marketing</u>				additional MnTC courses if needed to	reach
□ BUSN 1102	Social Media Marketing	3 cr	30 credits.		
□ BUSN 1210	Exceptional Customer Service	3 cr			
□ BUSN 2252	Professional Selling	3 cr			
	 				

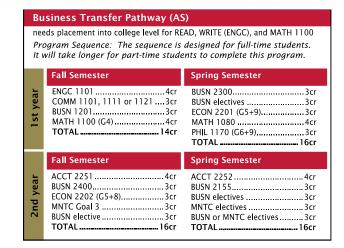


Business Transfer Pathway (AS), continued 60 Credits

Other Degree Requirements

- If needed, complete additional courses to reach 60 credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.





Casino Operations and Management Certificate 18-20 Credits

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale

Required Courses - 18-20 Credits □ HSMA 1103 Introduction to Hospitality and 4 cr **Tourism Management** ☐ HSMA 2100 Casino Management and 4 cr Operations $\hfill \hfill \hfill$ Food/Beverage Management 4 cr and Cost Control □ HSMA 2172 Hospitality Sales and Marketing 4 cr Management Complete one of the following three courses: □ HSMA 2096 **Hospitality Management** 2-4 cr Internship □ HSMA 2097 Senior Hospitality Internship 4 cr □ HSMA 2098 International Internship 4 cr

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Chemistry Transfer Pathway (AS) 60 Credits

The Chemistry Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated chemistry bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Core Courses - 40 Credits

8, 9, or 10.

☐ CHEM 1061	Principles of Chemistry 1	5 cr
□ CHEM 1062	Principles of Chemistry 2	5 cr
□ CHEM 2061	Organic Chemistry 1	5 cr
□ CHEM 2062	Organic Chemistry 2	5 cr
□ MATH 1510	Calculus 1	5 cr
□ MATH 1520	Calculus 2	5 cr
□ PHYS 1121	Physics 1 for Scientists and	5 cr
	Engineers	
□ PHYS 1122	Physics 2 for Scientists and	5 cr
	Engineers	

Additional Required C		
□ ENGC 1101 College Wr	iting	4 cr
Complete one of the following	two courses:	
□ COMM 1101 Fundament	als of Public Speaking	3 cr
□ COMM 1111 Interperson	al Communication	3 cr
□ Complete one course from MnTC Goal 5		3 cr
□ Complete one course from MnTC Goal 6		3 cr
□ Complete two courses from	MnTC Goal 7, 8, 9 or 10	7 cr
Note: It is recommended stud	lents select one course from	
MnTC Goal 5 or 6 that also satisfies one of the MnTC Goals 7,		

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Chemistry Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1510 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Spring Semester ENGC 11014cr CHEM 1062.....5cr CHEM 1061.....5cr MATH 15205cr MATH 15105cr MNTC GOAL 6.....4cr TOTAL TOTAL -Fall Semester **Spring Semester** CHEM 2061......5cr CHEM 2062......5cr PHYS 1121......5cr PHYS 1122.....5cr COMM 1101 or 11113cr MNTC GOAL 7, 8, 9 or 10 3cr MNTC GOAL 5......3cr MNTC GOAL 7, 8, 9 or 103cr TOTAL... _16cr TOTAL ...



Communication Studies Transfer Pathway (AA) 60 Credits

The Communication Studies Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Communication Studies bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Research indicates that communication skills are highly valued in today's society. Communication Studies explores how messages are sent and received in various contexts, cultures, and relationships. Students will foster skills in speaking, listening, presenting, and conflict management that will enhance their personal and professional relationships.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
□ COMM 1131	Intercultural Communication	3 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION - 2 COURSES □ ENGC 1101

□ Course meet by taking required COMM courses

CRITICAL THINKING GOAL 2: (met by completion of all 40 credits of the MnTC)

□ GOAL 3: NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must

include a lab)

□ Course #1 _ □ Course #2 ___

MATHEMATICAL/LOGICAL REASONING -GOAL 4:

1 COURSE □ Course #1 _

HISTORY AND SOCIAL/BEHAVIORAL SCIENCES GOAL 5: - 2 COURSES

(Select from two different departments)

COMM 2111 and PSYC 1110 recommended

□ Course #1 _____

□ Course #2 _

HUMANITIES AND FINE ARTS- 2 COURSES GOAL 6:

(Select from two different departments)

□ Course #1 _ □ Course #2

GOAL 7:

HUMAN DIVERSITY - 1 COURSE

☐ Course met by taking required COMM courses

GOAL 8:	GLOBAL PERSPECTIVE – 1 COURSE □ Course met by taking required COMM courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE

□ Course ___

GOAL 10: PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements - 20 Credits

□ One Health (HLTH) course.

□ One Exercise Science (EXSC) course.

☐ Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement (The department highly recommends that students take COMM 1141)

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Communication Studies Transfer Pathway (AA) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.				
	Fall Semester	Spring Semester		
1st year	ENGC 1101	COMM 1101		
	Fall Semester	Spring Semester		
2nd year	COMM 1121	COMM 2111 (G5)		
	*For MNTC Goal areas that require . different departments	2 courses, they must come from 2		



Community Health Worker Navigator Certificate 16 Credits

This certificate program will prepare students for a variety of entry-level healthcare employment opportunities. Community Health Worker-Navigators work to increase cultural competence, improve access to health care for underserved communities, coordinate care for chronically ill people, and map community resources to improve the overall health of communities. Community Health Worker-Navigators play a critical role in bridging the gap between community, health care, government, and social service systems.

Required Courses - 16 Credits

□ CHWN 1000	The Community Health Worker:	3 cr
	Role, Advocacy, Outreach, and	
	Resources	
□ CHWN 1100	Cultural Health Communication,	3 cr
	Teaching, and Capacity Building	
□ CHWN 1200	Documentation, Legal, and	3 cr
	Ethical Issues in Community	
	Health Work	
□ CHWN 1500	The Community Health Worker:	5 cr
	Health Promotion Competencies	
□ CHWN 2096	Community Health Worker	2 cr
	Navigator Internship	

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Computers/Information Management (AAS) 60 Credits

The Computers/Information Management degree is designed for students interested in employment after graduation or enhancing current skills. The program provides students with the knowledge of business and technology skills that facilitate the delivery and management of information. Students will use the latest computer technology and software programs in managerial decision making. Graduates from this program can enter careers in administration, management, sales, marketing, or technology departments within a business or organization.

Normandale's Computers/Information Management Program is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Core Courses - 18 Credits

□ CIM/BUSN	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ CIM/BUSN	Business Problem Solving	3 cr
1220	Analyzing - Excel	
□ CIM 2000	Computer Applications	3 cr
	Training Practicum	

Complete three of the following five courses:

•	_	
□ CIM 1000	Keyboarding and Essential	3 cr
	Computer Skills	
□ CIM 1230	Business Information	3 cr
	Management - Access	
□ CIM 1240	Business Word Processing	3 cr
□ CIM/BUSN	Intro to Project Management	3 cr
1250	Software	
□ CIM 1260	Presentation Software	3 cr

^{*}CIM 1000 is required if speed is less than 30 wpm with accuracy; skill will be measured in CIM 2000

Students who complete CIM/BUSN 1201 and CIM/BUSN 1220, 1230, 1240, and 1250 have completed the Computer Information Management Certificate and may apply to have this credential awarded to their student record at any point in their degree progress using the graduation application.

Additional Required Courses - 42 Credits

	•		
□ ENGC 1101	College Writing	4 cr	
□ ENGC 2102	Business and Technical Writing	3 cr	
Complete one of	the following three courses:		
□ COMM 1101	Fundamentals of Public Speaking	3 cr	
□ COMM 1111	Interpersonal Communication	3 cr	
□ COMM 1121	Small Group Communication	3 cr	
Complete one of the following two courses:			
□ ECON 2201	Principles of Microeconomics	3 cr	
□ ECON 2202	Principles of Macroeconomics	3 cr	

- □ Complete 11 credits from MnTC Goal 3, 4, 5, 6, 7, 8, 9 or 10
- Complete additional courses from any of the following areas to reach 42 credits for this section: Accounting (ACCT),
 Business (BUSN), Computer Science (CSCI), Computer Technology (COMT), Data Science (DSCI), or additional Computers/Information Management (CIM) electives.

Other Degree Requirements

If needed, complete additional courses to reach 60-level credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

nee Pro	mputers/Information Manageds placement into college level for RE ogram Sequence: The sequence is will take longer for part-time stude	AD, WRITE (ENGC) designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	CIM 12203cr ENCC 21023cr MNTC electives from Coal 5, 6, 7, 8, 9 or 104cr ECON 2201 or 22023cr *Major elective4cr TOTAL
	Fall Semester	Spring Semester
2nd year	CIM 2000	CIM 1230 or 1250

11 cr



Computers/Information Management Certificate 15 Credits

The Computers/Information Management Certificate is for the student who wants to extend their skills to position themselves for a job upgrade or promotion. Completion of many of the courses in this program will prepare students with skills necessary to successfully complete industry testing for specialized certificates showing mastery of current business software. These industry credentials show that the student meets globally recognized performance standards. Students earning these credentials are valuable to organizations that want to reinforce their technology investments with accelerated productivity and improved organizational performance. Industry certifications are available from companies such as Microsoft and from globally recognized organizations.

Required Courses - 15 Credits

•		
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ BUSN/CIM	Business Problem Solving	3 cr
1220	Analyzing - Excel	
□ CIM 1230	Business Information	3 cr
	Management - Access	
□ CIM 1240	Business Word Processing	3 cr
□ BUSN/CIM	Intro to Project Management	3 cr
1250	Software	

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Computer Science Transfer Pathway (AS) 60 Credits

The Computer Science Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Computer Science bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

4 cr

Core Courses - 28 Credits

☐ CSCI 1101	Introduction to Computing and	4 cr
	Problem Solving	
□ CSCI 1111	Introduction to Programming in C	4 cr
□ CSCI 2001	Computer Programming Concepts	4 cr
□ CSCI 2002	Algorithms and Data Structures	4 cr
□ CSCI 2021	Machine Architecture and	4 cr
	Organization	
□ CSCI/MATH	Discrete Structures of Computer	4 cr
2011	Science	

Complete one of the following four courses:

□ CSCI 1202	Introduction to Object-	4 cr
	Oriented Programming in C++	
□ CSCI 1203	Introduction to Computer	4 cr
	Programming in Java	
□ CSCI/MATH	Elementary Computational	4 cr
2033	Linear Algebra	

Additional Required Courses - 32 Credits □ ENGC 1101 College Writing

Complete one of the following three courses:		
□ COMM 1100	Introduction to Communication	3 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ COMM 1111	Interpersonal Communication	3 cr

 Complete a minimum of 20 additional credits from at least 4 of the MnTC Goal Areas: 3, 5, 6, 7, 8, 9, or 10 in order to have completed courses from at least 6 of the 10 goal areas. (Check with your transfer institution for specific requirements)

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Computer Science Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1510 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester Spring Semester ENGC 11014cr CSCI 1111.....4cr CSCI 1101.....4cr CSCI 2001.....4cr MATH 15105cr MNTC GOAL 3......5cr COMM 1100, 1101 or 1111 3cr MNTC GOAL 6.....3cr **Fall Semester** Spring Semester CSCI 2002.....4cr CSCI 2011 or MATH 2011 4cr CSCI 2021......4cr CSCI 1202, 1203, 2033 or MNTC GOAL 5......3cr MATH 20334cr MNTC GOAL 7, 8, 9 or 103cr MNTC elective......3cr TOTAL ... MNTC elective......3cr TOTAL.



Computer Technology (AAS) 60 Credits

Graduates who earn the AAS degree in Computer Technology will develop a broad range of skills to support computer-based applications in business and industry. These skills include problem-solving in computer architecture, database use and design, telecommunications, programming and system design. This degree positions individuals to seek employment in a variety of businesses that utilize Information Technology (IT) professionals.

Core Course	s – 32 Credits		Additional R	equired Courses -	
□ ACCT 2251	Financial Accounting	4 cr	28 Credits		
□ CIM/BUSN	Information Technology Concepts	3 cr	□ ENGC 1101	College Writing	4 cr
1201	and Business Software 1		□ ENGC 2102	Business and Technical Writing	3 cr
□ CIM/BUSN	Business Problem Solving	3 cr	□ MATH 1100	College Algebra	4 cr
1220	Analyzing - Excel				
□ COMT 1107	Introduction to Computer	4 cr		the following two courses:	_
	Technology		□ COMM 1111	Interpersonal Communication	3 cr
□ COMT 1173*	PC Architecture Operation and Interface	3 cr	□ COMM 1121	Small Group Communication	3 cr
□ COMT 1181*	Database Management Systems	3 cr		the following four courses:	
□ COMT 1184*	Telecommunications	3 cr	□ BUSN 2220	Statistics for Business and	4 cr
□ COMT 2188*	Systems Analysis and Design	3 cr		Economics	
	2,222 2 2,222 2 23		□ MATH 1080	Introduction to Statistics	4 cr
Complete at leas	t 6 credits from the following eight cou	rses:	□ MATH 1090	STATWAY Statistics 2	4 cr
□ COMT 1205*	Introduction to Visual Basic	3 cr	□ MATH 1095	STATWAY Statistics:	4 cr
□ COMT 1182	Advanced Database Management	3 cr		Accelerated	
	Systems		□ Complete one	additional MnTC course from	
□ COMT 2096	Internship in Computer	2-4 cr	Goals 3-10	additional wiff Course from	3-5 cr
	Technology		G0813 3-10		J-J (i
□ COMT 2250	Object Oriented Programming with Java for HCST	4 cr	□ Complete addit	tional courses to reach 28 credits	8-10 cr
□ CSCI 1101	Introduction to Computing and	4 cr	Recommended:		
- 000i 1101	Problem Solving	1 01	□ BUSN 1102	Social Media Marketing	3 cr
□ CSCI 1111*	Introduction to Programming in C	4 cr	□ BUSN 1105	Introduction to Business	3 cr
□ CSCI 1202*	Introduction to Object-Oriented	4 cr	□ BUSN 1125	Entrepreneurship	3 cr
	Programming in C++		□ CIM 1230	Business Information	3 cr
□ CSCI 1203*	Introduction to Computer	4 cr		Management - Access	
	Programming in Java		□ CIM/BUSN	Intro to Project Management	3 cr
* These courses	must be completed within the last sev	en	1250	Software	
	mpleting the Associate of Applied Scier		□ ENGT 2188	Electronics and Automation	4 cr
- '	ter Technology, with or without Industr		□ ART 1116	Introduction to Graphic	3 cr
Certification.	to. Tooology, man or manout moust	,		Design	
23/4/1044/0/11			□ ART 1122	Foundation Digital Imaging	3 cr
			_ /		• • • •



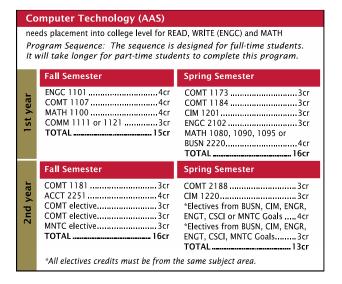
Computer Technology (AAS), continued 60 Credits

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.





Computer Technology Certificate 16 Credits

The Computer Technology Certificate is a "fast-track" path for acquiring computer technology skills. This curriculum will develop a student's problem-solving skills in computer architecture, database use and design, telecommunications, and beginning programming. The certificate encompasses learning of foundation skills for Information Technology (IT) professionals.

Required Courses - 16 Credits

□ COMT 1107	Introduction to Computer	4 cr
	Technology	
□ COMT 1173*	PC Architecture Operation and	3 cr
	Interface	
□ COMT 1181*	Database Management	3 cr
	Systems	
□ COMT 1184*	Telecommunications	3 cr
Complete one of	the following two courses:	
□ COMT 1205*	Introduction to Visual Basic	3 cr
□ COMT 1182	Advanced Database	3 cr
	Management Systems	

^{*} These courses must be completed within the last seven years prior to completing the Computer Technology Certificate with or without Industry Certification.

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Creative Writing (AFA) 60 Credits

The Associate of Fine Arts (AFA) degree in Creative Writing is designed for the student who has selected Creative Writing as a career option and intends to transfer to a fine arts baccalaureate program (BA or BFA) in Creative Writing at a four-year institution.

The AFA degree combines creative writing coursework in several genres with the study of literature. Students who complete this course of study and meet the admission requirements to their selected institution may be eligible to apply for admission with junior standing.

GOAL 1:

GOAL 10:

Admission to the Program

- A student may indicate interest in admission to the AFA in Creative Writing major by declaring a "Pre-AFA in Creative Writing" major.
- 2. To be admitted into the program, students must:
 - a. Complete ENGC 1101 with a grade of C or higher -Transferring into their Normandale transcript CLEP exams, or other proof of having met the <u>Goal 1 English</u> requirement.
 - Submit an application to the Director of the AFA in Creative Writing program, either hard copy or online at submittable.com, with the following materials included:
 - · Current contact information
 - A 10-page writing sample (either one document or a combination of documents) that shows evidence of college level writing skills in organization, revision, editing, and proofreading.

Required Courses

Incorporate the following Required Courses into the General Education/MnTC or other degree requirement sections below.

Complete 12 credits from the following six courses:

□ ENGW 1111	Introduction to Creative Writing	3 cr
□ ENGW 2112	Poetry Writing	3 cr
□ ENGW 2113	Fiction Writing	3 cr
□ ENGW 2114	Play and Screen Writing	3 cr
□ ENGW 2115	Memoir/Non-Fiction Writing	3 cr
□ ENGW 2900	Topics in Creative Writing	3 cr
Complete one of the following two courses:		
□ ENGL 2130	African American Literature	3 cr
□ ENGL 2133	Native American Literature	3 cr
□ ENGL 2151	American Literature 2	4 cr
□ Complete addit	ional ENGL course numbered over 2100	3 cr
□ ENGW 2800	AFA Capstone	3 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

COMMUNICATION - 2 COURSES

*See MnTC Curriculum for specific course options

	□ ENGC 1101 □ COMM 1100, 1101, 1111, 1121
	CRITICAL THINKING npletion of all 40 credits of the MnTC)
GOAL 3: (Select from	n two different departments; at least one must
	Course #1
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE □ Course
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select fron	n two different departments) □ Course #1 □ Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES n two different departments) □ Course #1 met by taking required ENGW course □ Course #2 met by taking required ENGL course
GOAL 7:	HUMAN DIVERSITY – 1 COURSE □ Course – met by taking required ENGL course
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE □ Course met by taking ENGL 2151

PEOPLE AND THE ENVIRONMENT - 1 COURSE

□ Course _____



Creative Writing (AFA), continued 60 Credits

Other Degree Requirements - 20 Credits

Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Creative Writing (AFA)				
needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.				
	Fall Semester	Spring Semester		
1st year	ENGC 1101	ENGW 1111 (G6)		
	Fall Semester	Spring Semester		
2nd year	ENGW 2112,2113,2114 or 2115 3cr ENGW 2112,2113,2114 or 2115 3cr MNTC Goal 8 3cr *MNTC Goal 3 with lab4cr MNTC Goal 4 3cr *TOTAL16cr *For MNTC Goal areas that require different departments ** ENGL course numbered over 210			



Creative Writing Certificate 29 Credits

This certificate program is designed for the student pursuing creative writing in addition to another program or as a supplement to current credentials. It combines creative writing coursework in several genres with the study of diverse American literature.

Required Courses - 26 Credits □ ENGC 1101 College Writing 4 cr □ ENGL 2151 American Literature 2 4 cr Complete one of the following three courses: □ ENGL 1130 Literature of Diversity 3 cr □ ENGL 2130 African American Literature 3 cr □ ENGL 2133 Native American Literature 3 cr Complete five of the following six courses: □ ENGW 1111 Introduction to Creative Writing 3 cr □ ENGW 2112 **Poetry Writing** 3 cr □ ENGW 2113 **Fiction Writing** 3 cr Play and Screen Writing □ ENGW 2114 3 cr □ ENGW 2115 Memoir/Non-Fiction Writing 3 cr □ ENGW 2900 Topics in Creative Writing 3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Criminal Justice Transfer Pathway (AS) 60 Credits

The Criminal Justice Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree that directly transfers to a designated Criminal Justice bachelor's degree program at Minnesota State universities. The curriculum has been carefully designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enters the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

	s – 27 Credits	
□ POLS 2250	Constitutional Law	3 cr
□ SOC 1104	Introduction to Sociology	3 cr
□ SOC 2112	Criminology	3 cr
□ SOC 2130	Introduction to Criminal Justice	3 cr
□ SOC 2131 □ SOC 2132	Juvenile Justice	3 cr 3 cr
□ SOC 2132	Police and Community Corrections	3 cr
□ 30C 2134	Corrections	3 (1
	the following two courses:	
□ SOC 1106	Social Problems in a	3 cr
	Changing World	
□ SOC/ANTH/	Women Across Cultures	3 cr
WMST 1121		
Complete one of	the following three courses:	
□ SOC 1109	Wealth and Poverty	3 cr
□ SOC 1115	Sociology of Sex and Gender Roles	3 cr
□ SOC 2110	American Minority Relations	3 cr
Additional R	equired Courses - 32 Credits	
	equired Courses - 32 Credits	4 cr
	College Writing	
□ ENGC 1101 □ PHIL 1103	College Writing Ethics	4 cr
□ ENGC 1101 □ PHIL 1103 Complete one of	College Writing Ethics the following two courses:	4 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111	College Writing Ethics the following two courses: Interpersonal Communication	4 cr 3 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of	College Writing Ethics the following two courses: Interpersonal Communication	4 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two co	College Writing Ethics The following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3	4 cr 3 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two co	College Writing Ethics The following two courses: Interpersonal Communication Intercultural Communication	4 cr 3 cr 3 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two com	College Writing Ethics The following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3	4 cr 3 cr 3 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two co □ Court □ Court	College Writing Ethics The following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1 se #2	4 cr 3 cr 3 cr 3 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two co □ Court □ Court Complete one co	College Writing Ethics The following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1	4 cr 3 cr 3 cr 3 cr 7-8 cr
Complete two complete one compl	College Writing Ethics I the following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1 se #2 ourse from MnTC Goal 4	4 cr 3 cr 3 cr 3 cr 7-8 cr
Complete two complete one complete one complete one complete one complete two complete complete one complete	College Writing Ethics I the following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1 se #2 ourse from MnTC Goal 4 r 1090 or 1095 recommended se	4 cr 3 cr 3 cr 3 cr 7-8 cr 4 cr
Complete two complete one compl	College Writing Ethics I the following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1 se #2 ourse from MnTC Goal 4 r 1090 or 1095 recommended se ourse from MnTC Goal 5	4 cr 3 cr 3 cr 3 cr 7-8 cr
□ ENGC 1101 □ PHIL 1103 Complete one of □ COMM 1111 □ COMM 1131 Complete two co □ Court □ Court Complete one co MATH 1080 o □ Court Complete one co (PSYC 1110 st	College Writing Ethics I the following two courses: Interpersonal Communication Intercultural Communication ourses from MnTC Goal 3 se #1 se #2 ourse from MnTC Goal 4 r 1090 or 1095 recommended se	4 cr 3 cr 3 cr 3 cr 7-8 cr 4 cr

Complete one control than PHIL	ourse from MnTC Goal 6 in departme	nt other 3 cr
□ Cou	rse	
•	ourse from MnTC Goal 10	3 cr
, ·	plete additional courses to reach 60 c tment recommends the following elec	
HLTH 1106	Drug Use and Abuse	3 cr
HLTH 2209	Emergency Medical Responder	3 cr
Other Degre	ee Requirements	

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Criminal Justice Transfer Pathway (AS) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
	Fall Semester	Spring Semester
1st year	ENGC 1101	COMM 1111 (G1) or COMM 1131 (G7+8)
	Fall Semester	Spring Semester
2nd year	SOC 2132 3cr SOC 2134 3cr POLS 2250 3cr SOC 1106 or 1121 3cr *MNTC Goal 3 3cr TOTAL 15cr	*MNTC Goal 3 w/lab
	*For MNTC Goal areas that require	2 savegas that must save from 2



This degree provides an introduction to data science by combining the tools of basic statistics, computer programming, and mathematical analysis with foundational concepts from a specific domain area. It will give students sufficient knowledge to enter the job market and to transfer credits to a baccalaureate program at a four-year institution.

Core Courses - 33-35 Credits

Completion of this degree is dependent upon a grade of C or higher in each of the following courses:

0		
□ CSCI 1111	Introduction to Programming in C	4 cr
□ CSCI 2001	Computer Programming Concepts	4 cr
□ CSCI 2002	Algorithms and Data Structures	4 cr
□ COMT 1181	Database Management Systems	3 cr
□ DSCI 2000	Foundations of Data Science	3 cr
□ MATH 2080	Statistical Modeling	3 cr
Complete one of	the following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
Complete two of t	the following MATH courses grouped as	
follows:		
□ MATH 1100	College Algebra	4 cr
MATH 1400	Survey of Calculus	4 cr
Or	,	
□ MATH 1500	Pre-Calculus	5 cr
MATH 1510	Calculus 1	5 cr

Additional Required Courses - 25-27 Credits

□ ENGC 1101	College Writing	4 cr
Complete one of COMM 1100 COMM 1101 COMM 1111	the following three courses: Introduction to Communication Fundamentals of Public Speaking Interpersonal Communication	3 cr 3 cr 3 cr
□ ECON 2201	Principles of Microeconomics	3 cr
	nimum of six additional credits from at following MnTC Goals:	6 cr

□ Complete additional courses to reach 60 college-9-11 cr level credits total. Suggested Domain Specialization Areas under Sample Domain Specialization Areas for the AS in Data Analytics.

Other Degree Requirements

- □ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Sample Domain Specialization Areas for the AS in Data Analytics - The domain specialties below represent a few possible areas of interest. Students should consult with faculty and advisors, including those at possible transfer institutions, for further information.

Bioinformatics:		
BIOL 1501	Principles of Biology 1	5 cr
CHEM 1020	Introductory Chemistry	4 cr
PHIL 1180	Biomedical Ethics	3 cr
ENGC 2102	Business and Technical Writing	3 cr
Finance:		
ACCT 2251	Financial Accounting	4 cr
ACCT 2254/	Introduction to Management	4 cr
BUSN 2254	Information Systems	
ECON 2202	Principles of Macroeconomics	3 cr
PHIL 1170	Business Ethics	3 cr
ENGC 2102	Business and Technical Writing	3 cr
Law Enforcement/G	Sovernment:	
PSYC 1110	Introduction to Psychology	4 cr
SOC 1106	Social Problems in a Changing World	3 cr
SOC 2130	Introduction to Criminal Justice	3 cr
POLS 1195	Conflict and Negotiation	3 cr
ENGC 2102	Business and Technical Writing	3 cr
CIM 1141	Presentation Graphics 1	1 cr
Marketing:		
BUSN 2254/	Introduction to Management Information	4 cr
ACCT 2254	Systems	
BUSN 2400	Principles of Marketing	3 cr
ECON 2202	Principles of Macroeconomics	3 cr
PHIL 1170	Business Ethics	3 cr
ENGC 2102	Business and Technical Writing	3 cr
CIM 1141	Presentation Graphics 1	1 cr
Mathematics:	·	
GEOG 1050	Introduction to Maps and Places	3 cr
PHIL 1140	Environmental Ethics	3 cr
11112 22 10	Or	0 0.
GEOG 1104	Resources, Society and Environment	3 cr
MATH 1520	Calculus 2	5 cr
MATH 2400	Probability and Statistics with Calculus	4 cr
Others.	•	

Data Analytics (AS)

Students can also develop other domain specialization areas in consultation with their advisor and faculty.

needs placement into college level for READ, WRITE (ENGC) and MATH 1500 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.			
	Fall Semester	Spring Semester	
1st year	ENGC 1101	CSCI 1111 4cr MA FF 510 5 it MATH 1080 4cr ECON 2201 2cr TOTAL 6cc	
	Fall Semester	Spring Semester	
2nd year	CSCI 2001 4cr DSCI 2000 3cr COMT 1181 3cr MATH 2080 3cr	CSCI 2002	

Dental Hygiene (AS) 88 Credits



This program provides academic and clinical educational opportunities for capable individuals to acquire the knowledge, skills, and attitudes necessary for the professional practice of dental hygiene. The curriculum focuses on sciences, as well as essential technical and clinical skills in preparation for providing preventive dental hygiene services to the public. Dental hygienists are preventive oral healthcare professionals, licensed in dental hygiene, which provide educational, clinical, and therapeutic services supporting a patient's total health through the promotion of optimal oral health.

The mission of the Dental Hygiene Program at Normandale Community College is to prepare dental hygiene students in the provision of comprehensive dental hygiene care, while emphasizing professionalism, communication, social responsibility, and lifelong learning. Program goals include the intent to:

- · Prepare graduates who will be competent to provide quality comprehensive dental hygiene care
- Promote admission of a qualified and diverse student population
- · Participate in interprofessional community health promotion
- · Engage in professional activities and lifelong learning
- Maintain a program that reflects relevant, current and advancing dental hygiene practice
- Incorporate emerging technologies to enhance quality dental hygiene care

Normandale Community College offers the Associate of Science (AS) degree in Dental Hygiene as a two-year program located within the health sciences division. NOTE: Most students complete their required science and liberal arts courses prior to acceptance into the program. The dental hygiene coursework requires four semesters to complete and begins each fall semester. Graduates will be eligible to take the National Board Dental Hygiene Examination, Central Regional Dental Testing Examination, and the Minnesota State Board of Dentistry Jurisprudence Examination for licensure in the State of Minnesota.

Following graduation and licensure requirements of the State Board of Dentistry, the dental hygienist becomes a primary healthcare professional, oral health educator and clinician who may choose to work in a variety of settings.

Dual Admission and Enrollment Option - BS in Dental Hygiene

Through a partnership with Metropolitan State University, we offer the option of a dual admissions and enrollment program. This means that there is simultaneous admittance to the Normandale Associate Degree program and Metropolitan State University Bachelor of Science in Dental Hygiene (BSDH) program if an applicant chooses this option. For those who are anxious to obtain a BSDH, this can be accomplished within one to two semesters after completion of the Associate Degree Program. More information about this option is available by meeting with the Health Sciences Enrollment Manager, Kiara Taylor.

The program in dental hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or 211 E. Chicago Ave., Chicago, Illinois 60611. The Commission's web address is: http://www.ada.org/en/coda

Core Course	es – 50 Credits		□ DENH 1162	Pharmacology for the Dental	2 cr
Courses are web	o-supplemented and web-enhanced,	requiring	B DE 1102	Hygienist	2 0.
computer and In	ternet access		□ DENH 2240	Clinic 2 Theory	2 cr
□ DENH 1112	Oral and Facial Anatomy	3 cr	□ DENH 2241	Clinic 2	6 cr
□ DENH 1140	Pre-Clinic Theory	3 cr	□ DENH 2242	Clinic 3 Theory	2 cr
□ DENH 1141	Pre-Clinic Skill Development	4 cr	□ DENH 2243	Clinic 3	6 cr
□ DENH 1142	Clinic 1 Theory	2 cr	□ DENH 2252	Clinical Radiology 1	1 cr
□ DENH 1143	Clinic 1	4 cr	□ DENH 2254	Clinical Radiology 2	1 cr
Complete one of	f the following two courses:		□ DENH 2263	Pain Management	2 cr
□ DENH 1150	Dental Radiology	4 cr	□ DENH 2264	Periodontics for the Dental	2 cr
	CJ.			Hygienist	
□ DENH 1151	Accelerated Dental Radiology	2 cr	□ DENH 2266	General and Oral Pathology	2 cr
Complete one of	f the following two courses:		□ DENH 2281	Preventive Concepts in	2 cr
□ DENH 1160	Dental Materials	2 cr		Community Dental Health	
□ DENH 1161	Accelerated Dental Materials	1 cr			



Dental Hygiene (AS), continued 88 Credits

Additional Required Courses - 38 Credits

Progression through the program is dependent upon a grade of C or higher for each of the following courses:

□ ENGC 1101	College Writing	4 cr
□ COMM 1111	Interpersonal Communication	3 cr
□ CHEM 1050	Foundations of Organic and	3 cr
	Biochemistry	
□ BIOL 2041	Human Anatomy	4 cr
□ BIOL 2042	Human Physiology	4 cr
□ BIOL 2043	Microbiology	4 cr
□ HLTH 1107	Principles of Nutrition	3 cr
□ PSYC 1110	Introduction to Psychology	4 cr
□ SOC 1104	Introduction to Sociology	3 cr

Complete **two courses** from MnTC Goal areas 4, 6, 7, 8, 9, or 10. Courses must satisfy at least two different MnTC Goal areas.

□ Course #1	
□ Course #2	

Students who are considering a bachelor's degree completion program are strongly encouraged to complete their Minnesota Transfer Curriculum (MnTC) electives by taking MATH 1080 (Goal 4) and one class from Goal 6 and/or 10. These courses will meet bachelor degree completion requirements at Metropolitan State University. For more information, visit www.metrostate.edu/cnhs.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Admission Requirements and Application Process

Applicants who are new to Normandale must complete
the online college application, found at:
 www.normandale.edu/apply.
 Acceptance to the college
to the college does not imply acceptance into the dental
hygiene program. A separate Normandale Health
Sciences Dental Hygiene Program application must be
submitted to be considered for acceptance into the
dental hygiene program. The completed application is to
be submitted to the Health Sciences Enrollment
Manager (located in A2507) by December 31 each year,
and can be found on the Dental Hygiene Apply page.

- An overall college GPA of 2.75 or higher is required.
- If the student earned credits in the fall semester, official transcripts with these fall grades must be submitted to the Health Science Enrollment Manager by January 15 to complete the application.
- All applicants will be notified of their dental hygiene program application status via US mail on or before April 30 of each year.
- Applicants who are not accepted into the dental hygiene program and have met the application requirements will be placed on an alternate list.
- Applicants who were placed on the alternate list and were not accepted into the program will need to meet all requirements and reapply for admission into the program the following year.

Professional Licensure/Certification Disclosure

The AS in Dental Hygiene prepares students to take the written National Dental Hygiene board exam and the Central Regional Dental Services practice exam, which are the licensing exams to become a licensed Dental Hygienist in Minnesota. Students are eligible for licensure in Minnesota as well as other states. Here are the states accepting Central Regional Testing Services examination results, where Normandale Dental Hygiene graduates are eligible for initial licensure via taking these two examinations.

Effective July 1, 2020 the U.S. Department of Education implemented regulation 34 CFR 668.43 (a) (5) (v)) which requires our Associate Degree Program in Dental Hygiene to provide:

- A list of all states/jurisdictions where the institution's curriculum meets state educational requirements for professional licensure or certification;
- A list of all states/jurisdictions where the institution's curriculum does not meet state educational requirements for professional licensure or certification; and
- A list of all states/jurisdictions where the institution has not made a determination of whether the curriculum meets educational requirements.

At this time, Normandale has not made a determination that our dental hygiene curriculum meets or does not meet state educational requirements for licensure or certification. Please contact the dental board for the state in which you would like to be licensed. Here is a link to the American Association of Dental Boards' list of all state boards.

If you have questions, please contact the Health Sciences Enrollment Manager, <u>HealthSciences@normandale.edu</u>, 952-358-8417.



Dental Hygiene (AS), continued 88 Credits

Dental Hygiene Application Requirements

The requirements below must be completed before the application deadline of December 31. A grade of C or higher is required for each course and all science courses must have labs. Any transfer courses must be evaluated as equivalent to the required course.

□ ENGC 1101	College Writing	4 cr		
□ CHEM 1050	Foundations of Organic and	3 cr		
	Biochemistry			
□ BIOL 2041	Human Anatomy	4 cr		
☐ Eligible for college-level mathematics*				

*College-level math eligibility requirement can be met by:

- Completion of college-level mathematics course with a grade of C or higher.
- Eligibility to take a college-level mathematics course (MATH 1080 Introduction to Statistics MATH 1090 STATWAY Statistics 2, MATH 1095 STATWAY Statistics: Accelerated, MATH 1100 College Algebra or higher) at the time of the December 31 deadline through:
 - a. An active placement through the Normandale course placement process; expired placements will not be accepted.
 - b. Completion of an appropriate developmental math course (MATH 0630, 0990, or 0995) within 2 years of the December 31 admission deadline with a C, P or higher.

Information on course placement can be found at: www.normandale.edu/admissions/course-placement-

• Must show registration for the course in spring after the deadline if not already completed:

□ BIOL 2042	Human Physiology	4	cr

• Recommended to complete before the deadline:

□ BIOL 2043 Microbiology 4 cr

*To be a more competitive applicant, students are strongly encouraged to complete BIOL 2042 Human Physiology, BIOL 2043 Microbiology, and Minnesota Transfer Curriculum Goal 4 Elective MATH 1080 Introduction to Statistics prior to application deadline.

Additional Program Information

Visit www.normandale.edu/dental-hygiene. For further questions, please contact the Health Science Enrollment Manager, Kiara Taylor at kiara.taylor@normandale.edu or call 952-358-8417.

General Information

In addition to general fees and books, admitted dental hygiene students purchase uniforms, instruments, clinic supplies, software and textbooks. Each student is required to purchase dental professional liability insurance which is included in course fees each fall. Students will be required to pay additional fees to take the National Board Exam, Central Regional Clinical Board Exam and State Jurisprudence examination during the spring semester of the second year of study.

Due to the nature of the dental hygiene profession, students will be participating in a learning environment that has the potential of exposure to blood borne pathogens. Students accepted into the program are provided with written policies and instruction on infection control protocol to reduce the risk of disease transmission. The program complies with all institutional, local, state and federal policies. Policies and procedures on the dental hygiene program's infection control protocol are available to applicants upon request. All students must complete the following prior to entry in fall semester of the first year of study and must be maintained throughout enrollment in the program.

- . Physical examination
- . Immunizations
- . Optical examination
- . Successful Minnesota Department of Human Services background study
- . HIPAA training
- . Cardiopulmonary Resuscitation (CPR) for the health care provider

Students entering the Dental Hygiene program are expected to meet the Technical Standards for Entry-Level Dental Hygiene Programs. These technical standards are required abilities for effective performance in the Minnesota State dental hygiene education program. The standards are compatible with the scope of practice as defined by the Minnesota Board of Dentistry.



Sequence of	f Courses:		Second Yea	r Fall Semester - 18 Credits	
First Year F. COMM 1111 DENH 1112 DENH 1140 DENH 1141	all Semester - 13 Credits Interpersonal Communication Oral and Facial Anatomy Pre-Clinic Theory Pre-Clinic Skill Development	3 cr 3 cr 3 cr 4 cr	 □ DENH 2240 □ DENH 2241 □ DENH 2252 □ DENH 2263 □ DENH 2264 	Clinic 2 Theory Clinic 2 Clinical Radiology 1 Pain Management Periodontics for the Dental Hygienist	2 cc 6 cc 1 cc 2 cc 2 cc
First Year S	pring Semester - 18 Credits Microbiology	4 cr	□ DENH 2266□ HLTH 1107	General and Oral Pathology Principles of Nutrition	2 ci 3 ci
□ DENH 1142 □ DENH 1143 □ DENH 1150 □ DENH 1160 □ DENH 1162	Clinic 1 Theory Clinic 1 Dental Radiology Dental Materials Pharmacology for the Dental Hygienist	2 cr 4 cr 4 cr 2 cr 2 cr	Second Yea DENH 2242 DENH 2243 DENH 2254 DENH 2281	Clinic 3 Theory Clinic 3 Clinical Radiology 2 Preventive Concepts in Community Dental Health	2 cr 6 cr 1 cr 2 cr
□ PSYC 1110	Introduction to Psychology C Goal area 4, 6, 7, 8, 9, or 10	4 cr 4 cr		Introduction to Sociology nformation nation on Advanced Degrees, visit le.edu/dental-hygiene advanced-degr	3 cr rees.



Economics Transfer Pathway (AA) 60 Credits

The Economics Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated economics bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Economics provides new way to think about the world – an analytical mindset that is valuable in a wide variety of careers. It also helps people make better decisions in their private lives.

Students study how societies, businesses and individuals manage the scarce resources they have – and sometimes what the unintended consequences of their decisions are. In doing so, they learn to think more critically about issues we all face – not just commercial matters such as supply and demand, but also societal concerns such as government intervention, pollution control, and inequality.

Some economics majors become business or government analysts. But many graduates use this data-driven way of thinking to become successful in many fields, including business, law, medicine, government, nonprofit work and international relations. Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required				GOAL 4:	MATHEMATICAL/LOGICAL REASONING -	
Incorporate	e the f	following Required Courses into the Gene	ral		1 COURSE	
Education/	/Minne	esota Transfer Curriculum or Additional			□ Course met by taking required MATH courses	
Course Red	quiren	nents sections below.		GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES -	
□ ECON 22	01	Principles of Microeconomics	3 cr	GO/IL O.	2 COURSES	
□ ECON 22		Principles of Macroeconomics	3 cr	(Select from	n two different departments)	
□ MATH 11	.00	College Algebra	4 cr	(30.000	□ Course #1 met by taking required ECON courses	
Or any hig is a prere	_	numbered MATH course for which 1100 e.			□ Course #2	
Complete c	no of	the following four courses:		GOAL 6:	HUMANITIES AND FINE ARTS- 2 COURSES	
□ BUSN 22		Statistics for Business and	4 cr	(Select from	m two different departments)	
	.20	Economics	4 0		□ Course #1	
□ MATH 10	180	Introduction to Statistics	4 cr		□ Course #2	
□ MATH 10		STATWAY Statistics 2	4 cr	GOAL 7:	HUMAN DIVERSITY - 1 COURSE	
□ MATH 10		STATWAY Statistics: Accelerated	4 cr	GOAL 1.	□ Course	
		cation/Minnesota Transfer		GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course met by taking required ECON courses	
		(MnTC) - 40 Credits iculum for specific course options		GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE	
GOAL 1:	COM	1MUNICATION - 2 COURSES		GOAL 3.	□ Course met by taking required ECON courses	
GO/12 21	□ EN	NGC 1101		GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE	
		OMM 1101 or 1111 or 1121			□ Course	
GOAL 2: (Met by cor		TICAL THINKING on of all 40 credits of the MnTC)				
GOAL 3:		URAL SCIENCES - 2 COURSES different departments; at least one must				
include a la		amorone doparamona, at rodot one must				
	,	ourse #1				
		ourse #2				



Economics Transfer Pathway (AA), continued 60 Credits

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement
 The department recommends taking at least one additional ECON course.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

Economics Transfer Pathway (AA) needs placement into college level for READ, WRITE (ENGC) and MATH 1100 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. **Spring Semester** ENGC 11014cr COMM 1101, 1111 or 11213cr4cr ECON 2202 (G5+8).....3cr MATH 1080 or BUSN 22204cr ECON 2201 (G5+9).....3cr *MNTC Goal 6......3cr MNTC Goal 5 (non ECON)......3cr MATH 1100 (G4).....4cr EXSC elective1cr HLTH elective.....3cr Fall Semester **Spring Semester** *MNTC Goal 3......3cr *MNTC Goal 3 with lab.....4cr *MNTC Goal 6......3cr MNTC Goal 103cr MNTC Goal 73cr Electives3cr Elective3cr Electives3cr Elective3cr Electives1cr TOTAL.....14cr *For MNTC Goal areas that require 2 courses, they must come from 2 different departments



Elementary Education Foundations Transfer Pathway (AS) 60 Credits

The Elementary Education Foundations Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated elementary education bachelor's degree programs at Minnesota State universities.* The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field. *Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University; and Winona State University.

Minnesota State University, Mankato offers the Bachelor of Science program in Elementary Education on the Normandale Community College campus.

Individuals who have been arrested, charged or convicted of any criminal offense should investigate the impact that the arrest, charge or conviction may have on their chances of employment in the field they intend to study or on their chances to obtain federal, state and other higher education financial aid.

Required Courses - 60 Credits

□ ART 1101	The Visual Arts	3 cr
□ BIOL 1100	Survey of Biology	4 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
	(Grade of B or higher is required)	
□ EDUC 1101	Introduction to Education	4 cr
	(Grade of C or higher is required)	
□ EDUC 2101	Educational Technology	3 cr
□ EDUC 2222	Multicultural Education and Human	3 cr
	Relations in Schools	
□ EDUC 2223	Foundations of Instruction	2 cr
□ ENGC 1101	College Writing	4 cr
	(Grade of B or higher is required)	
□ GEOG 1121	World Regional Geography	3 cr
☐ HIST 1111	United States History 1	4 cr
□ HLTH 1106	Drug Use and Abuse	3 cr
□ MATH 1055	Elements of Mathematics 1	4 cr
□ MATH 1065	Elements of Mathematics 2	4 cr
□ PHYS 1001	Energy, Climate & Physics in Society	3 cr
□ PHYS 1002	Energy, Climate & Physics in Society	1 cr
	Laboratory	
□ PSYC 1109	Child and Adolescent Development	3 cr
	(Grade of C or higher is required)	
□ THTR 1151	Acting 1	3 cr
□ Complete one	course from MnTC Goal 10	3 cr

□ Complete additional course(s) to reach 60 credits total.

The department recommends the following courses:

The department rece	inneriae are renewing courses.	
□ EDUC 2408	Individuals with Diverse and	4 cr
	Exceptional Needs	
□ ENGL 2060	Children's and Young Adult	3 cr
	Literature	
□ ENGT 1050	Bridging Engineering and	3 cr
	Education	
□ SPAN/EDUC	Spanish for Educators 1	3 cr
1120		

Other Degree Requirements

- □ Complete required 30 field work hours
- □ Demonstrate expected standards in Professional Disposition
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit.

Elementary Education Foundations Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1055 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester Spring Semester

	Fall Semester	Spring Semester
1st year	ENGC 1101	EDUC 2223
	22	
	Fall Semester	Spring Semester

NORMANDALE COMMUNITY COLLEGE

Engineering Broad Field (AS) 60 Credits

Engineers identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics in fields as diverse as computer hardware and software, assistive technology, medical technology, infrastructure, and defense systems. They produce solutions that consider public safety and welfare, as well as environmental and economic factors. They develop and conduct experiments and analyze the results. Engineers work effectively on teams and communication with a broad range of audiences. The Associate of Science in Engineering Broad Field from Normandale ensures that students have the foundation and prerequisites to complete a bachelor's degree at a transfer institution in wide range of engineering disciplines. Our students transfer to four year programs regionally and nationwide.

To complete the AS in Engineering Foundations at Normandale, students must:

- 1. Select the university to which you plan to transfer and select an engineering specialty offered at that university (such as Civil, Chemical, Mechanical, etc.).
- 2. Develop a coursework plan that includes all the requirements listed below.
- 3. Apply to graduate during their final semester at Normandale.

Core Courses - 47 Credits

□ MATH 1510	Calculus 1	5 cr
□ MATH 1520	Calculus 2	5 cr
□ MATH 2510	Calculus 3: Multivariable Calculus	5 cr
□ MATH 2520	Calculus 4: Differential Equations with Linear Algebra	5 cr
□ PHYS 1121	Physics 1 for Scientists and Engineers	5 cr
□ PHYS 1122	Physics 2 for Scientists and Engineers	5 cr
□ CHEM 1061	Principles of Chemistry 1	5 cr
single Engineer (e.g. civil, computer from the table biggroup Cours) Cours Cours	iter, electrical, general, mechanical, etc	12 cr .)

Key for Engineering Degrees:

CIV Civil Engineering
COM Computer Engineering
ELEC Electrical Engineering
ENV Environmental Engineering
GEN General Engineering
MECH Mechanical Engineering
MANU Manufacturing Engineering
COMP Composite Engineering

Key for Engineering Specialty Table:

- A See advisor/counselor to confirm course transfer to a university program
- R Required university program course

This is a general guide. Please check with your academic advisor and transfer advisor.

CIV	сом	ELEC	ENV	GEN	месн	MANU	сомр	COURSE	CR
Α	А	А	R	R	R	А	R	ENGR 1020 Intro to Engineering	4
	R	R	R	R	R	А	R	Computer Programming*	3
R		А	R	R	R	R	R	ENGR 2235 Statics	3
R		А	R	R	R	R	R	ENGR 2236 Dynamics	3
R				R	R	R	R	ENGR 2331 Deformable Body Mechanics	3
R		A	А	A	R	A	A	ENGR 2231 Thermodynamics	3
	R	R		R	R	R	R	ENGR 2015 Linear Circuit Analysis	4
								ENGR 2016 Steady-State Circuit Analysis	1
	R	R						ENGR 2115 Introduction to Analog and Digital Electronics	5
	R	R			А			ENGR 2301 Intro to Digital Systems Design A	2
	R	R			А			ENGR 2302 Intro to Digital Systems Design B	2
	A		А		A	A	A	MATH 2400 Probability & Statistics w/Calculus	4
A	А	А	R	A	А	А	R	CHEM 1062 Principles of Chemistry 2	5
			R				R	CHEM 2061 & 2062 Organic Chemistry 1 & 2	10

^{*}CSCI 1113 is typically recommended for all specialties except Computer Engineering. Consult a transfer advisor at the intended transfer university to confirm appropriate course.



Engineering Broad Field (AS), continued 60 Credits

Additional Required Courses - 13 Credits

□ ENGC 1101	College Writing	4 cr
□ Complete two	courses that satisfy MnTC Goals	6 cr
5 and 6	-	

One of these courses must also satisfy at least one of the following MnTC Goal areas: 7, 8, 9 or 10.

□ Complete elective course to reach a minimum of 60 credits selected from courses that fulfill requirements at the desired transfer institution.

Some transfer programs have specific course requirements. Electives can be additional required engineering courses (recommended) or additional general education courses. Consult with an advisor or counselor for guidance on course selection.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

University Admissions and Graduation Requirements

This degree has an articulation agreement with Minnesota State University, Mankato; St. Cloud State University; Winona State University; University of Minnesota; University of Minnesota, Duluth and any System college approved to offer the Associate of Science in Engineering Broad Field degree program. These schools have agreed that:

- All MnTC courses listed above and required (R)
 Engineering Specialty courses below will transfer and count toward university baccalaureate degree program requirements.
- Completion of the Associate of Science in Engineering Broad Field degree does not guarantee admission to a baccalaureate degree program.
- Students must meet university admission requirements and degree program admission requirements.
- Baccalaureate engineering degree programs may have limited enrollment capacity with seats available on a competitive basis.
- Students accepted into a university must fulfill the baccalaureate program graduation requirements.

Engineering Broad Field (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1510 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. **Fall Semester** Spring Semester ENGC 11014cr MATH 15205cr MATH 15105cr PHYS 1121......5cr ENGR elective for specialty.....4cr CHEM 1061.....5cr TOTAL..... TOTAL **Fall Semester Spring Semester** MATH 25105cr MATH 25205cr PHYS 1122.....5cr ENGR elective for specialty 4cr ENGR elective for specialty 3cr *MNTC GOAL 54cr ENGR elective for specialty 3cr *MNTC GOAL 63cr TOTAL *One of the above MNTC courses must also satisfy MNTC GOAL 7, 8, 9 or 10



English Transfer Pathway (AA) 60 Credits

The English Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree that directly transfers to a designated English bachelor's degree program at Minnesota State universities. The curriculum has been designed so that students completing this pathway and transferring to one of the seven Minnesota State universities enter the university with junior-year status. Students must take one course from each of four designated content areas: introduction to literary studies, a literature survey course, a diverse literature course, and a writing for a specific purpose course. Within the last three content areas, students at Normandale can choose from several possible courses. Four credits will transfer into at least one track (though, at each receiving school's discretion, possibly more than one) of the receiving institution's English major. Those four credits may be applied directly to a required major course when applicable at a particular receiving school or as an elective course in the major.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

Course Requiren	nents sections below.	
□ ENGL 2000	Introduction to Literary Studies:	3 cr
	Writing About Literature	
Complete one of	the following four courses	
□ ENGL 2150	American Literature 1	4 cr
□ ENGL 2151	American Literature 2	4 cr
□ ENGL 2160	British Writers 1	4 cr
□ ENGL 2161	British Writers 2	4 cr
Complete one of	the following six courses	
□ ENGL 1130	Literature of Diversity	3 cr
□ ENGL 1140	Gender and Literature	3 cr
□ ENGL 1170	Modern World Literature	3 cr
□ ENGL 2130	African American Literature	3 cr
□ ENGL 2133	Native American Literature	3 cr
□ ENGL 2174	African Literature	3 cr
Complete one of	the following six courses	
□ ENGW 1111	Introduction to Creative Writing	3 cr
□ ENGW 2112	Poetry Writing	3 cr
□ ENGW 2113	Fiction Writing	3 cr
□ ENGW 2114	Play and Screen Writing	3 cr
□ ENGW 2115	Memoir/Non-Fiction Writing	3 cr
□ ENGC 2102	Business and Technical Writing	3 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1101 or 1111
G. G	CRITICAL THINKING npletion of all 40 credits of the MnTC)
	NATURAL SCIENCES - 2 COURSES a two different departments; at least one must b)
	□ Course #1 □ Course #2
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE Course
	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES two different departments) □ Course #1 □ Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES ng required ENGW and ENGL courses.
GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course



English Transfer Pathway (AA), continued 60 Credits

Additional Course Requirements - 7 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement (The department highly recommends that students fulfill these remaining credits with courses emphasizing an area of literature not addressed via the above requirements and/or courses that emphasize writing that requires research and MLA citation. For example, these may include writing intensive literature courses and/or advanced composition courses. Also, students planning to transfer into a specific English track, such as creative writing, at the receiving institution may fulfill these 7 credits with classes specifically aimed at that specific track.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

English Transfer Pathway (AA) needs placement into college level for READ, WRITE (ENGC) and MATH Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Spring Semester ENGL 2000..... ENGL2150, 2151, 2160 MNTC Goal 43cr or 2161 (G6)......4cr *MNTC Goal 53cr *MNTC Goal 33cr TOTAL... *MNTC Goal 54cr EXSC elective1cr TOTAL ... Fall Semester **Spring Semester** ENGL 1130, 1140, 1170, ENGW 1111, 2112, 2113, 2130, 2133 or 21743cr 2114 or 2115 (G6)3cr *MNTC Goal 3 with lab......4cr MNTC Goal 103cr MNTC Goal 73cr HLTH elective......3cr MNTC Goal 83cr Electives3cr Electives3cr MNTC Goal 93cr TOTAL 16cr Electives1cr TOTAL ... *For MNTC Goal areas that require 2 courses, they must come from 2 different departments



Exercise Science Transfer Pathway (AS) 60 Credits

The Exercise Science Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Exercise Science bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Students obtaining the Exercise Science degree will have a strong working knowledge of exercise and sport physiology, applied kinesiology and positive behavior change. This degree incorporates active classroom learning. These skills are emphasized to prepare students for future performance and therapeutic applications.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

6 cr

Core Courses - 17 Credits

Areas: 7, 8, 9 or 10

□ EXSC 1129	Fitness for Life I	2 cr
□ EXSC 1200	Beginning Weight Training	1 cr
□ EXSC 2300	Introduction to Exercise Science	3 cr
□ EXSC 2305	Exercise Physiology	3 cr
□ EXSC 2310	Foundations of Personal Training	3 cr
□ EXSC 2315	Exercise Prescription	3 cr
□ EXSC 2330	Applications of Personal Training	2 cr

	Excrosser resorration	0 01
□ EXSC 2330	Applications of Personal Training	2 cr
Additional R	equired Courses - 43 Credits	;
□ ENGC 1101	College Writing	4 cr
□ BIOL 1501	Principles of Biology 1	5 cr
□ BIOL 2041	Human Anatomy	4 cr
□ BIOL 2042	Human Physiology	4 cr
□ CHEM 1050	Foundations of Organic and	3 cr
	Biochemistry	
□ HLTH 1107	Principles of Nutrition	3 cr
□ PSYC 1110	Introduction to Psychology	4 cr
Complete one of	the following four courses:	
□ COMM 1100	Introduction to Communication	3 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
Complete one of	the following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
□ Complete one	course from MnTC Goal 5	
(non-PSYC cour	rse)	3-4 cr
□ Complete two o	courses from two different MnTC Goal	

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Exercise Science Transfer Pathway (AS) needs placement into college level for READ, WRITE (ENGC) and MATH Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester **Spring Semester** ENGC 11014cr BIOL 2041......4cr EXSC 23003cr EXSC 12001cr EXSC 23053cr EXSC 23103cr EXSC 1129.....2cr EXSC 23302cr CHEM 1050.....3cr EXSC 23153cr HLTH 1107 TOTAL -TOTAL ... Fall Semester Spring Semester BIOL 2042.....4cr BIOL 1501.....5cr COMM1100, 1101, 1111 MNTC Goal 5 (non PSYC)......3cr or 11213cr MATH 1080, 1090 or 10954cr MNTC Goal 7, 8, 9 or 106cr TOTAL.. PSYC 1110......4cr



Exercise Specialist Certificate12 Credits

The Exercise Specialist Certificate includes Exercise Science courses that provide comprehensive curriculum designed to prepare students to successfully participate in the American College of Sports Medicine (ACSM) Certified Personal Training Examination and enter the workforce as a personal trainer working with generally healthy populations. The Exercise Specialist Certificate is recognized as a "career laddering" opportunity for our students to encourage further retention of degree completion while students gain additional credentials to professionally compete for careers within the fitness industry. Students must have a grade of "C" or higher in the following four courses to earn the certificate.

Courses - 12 Credits

Complete each of the following courses with a grade of C or higher.

□ EXSC 2300	Introduction to Exercise Science	3 cr
□ EXSC 2305	Exercise Physiology	3 cr
□ EXSC 2310	Foundations of Personal	3 cr
	Training	
□ EXSC 2315	Exercise Prescription	3 cr

- □ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn at least one third of the required certificate credits from Normandale.



Family Studies Certificate 18 Credits

Family relationships tend to pervade all aspects of our personal and professional lives. Consequently, the systematic study of these relationships can serve to improve our lives. They can also help us to better understand the lives of others. This certificate is intended to provide a foundation for all of these desirable outcomes.

The Family Studies Certificate offers students foundational coursework in preparation to transfer to a four-year college in the area of Family Studies. Or it offers students a credential to find employment in areas associated with Family Studies. While not a required credential for students who work in areas associated with Family Studies, it quickly communicates a relevant background to prospective employers. Students will gain knowledge from various fields of study by completing this certificate.

Required Courses - 18 Credits □ COMM 2111 Family Communication 3 cr □ HIST 1131 Family: Sex/Gender/Power: A 3 cr Cross-Cultural, Historical Perspective □ SOC 1102 Love, Sex and Family 3 cr □ SOC 2114 Families in Crisis 3 cr Complete two of the following six courses: □ ANTH/SOC/ Introduction to Women's Studies 3 cr WMST 1120 and Gender Studies □ ANTH/SOC/ Women Across Cultures 3 cr WMST 1121 □ SOC 1115 Sociology of Sex and Gender Roles 3 cr □ PSYC 1109 Child and Adolescent 3 cr Development □ PSYC 1220 Psychology of Adulthood and Aging 3 cr □ HIST 2111 Lesbian, Gay, Bisexual, and 3 cr Transgender U.S. History

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Food and Beverage Management Certificate 18-20 Credits

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

Required Courses - 18-20 Credits □ HSMA 1103 Introduction to Hospitality and 4 cr **Tourism Management** Food/Beverage Management □ HSMA 2144 4 cr and Cost Control \square HSMA 2150 Revenue Management in 4 cr Hospitality and Tourism □ HSMA 2173 Convention and Meeting 4 cr Planning Management Complete one of the following three courses: □ HSMA 2096 **Hospitality Management** 2-4 cr Internship □ HSMA 2097 Senior Hospitality Internship 4 cr □ HSMA 2098 International Internship 4 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



The Associate of Science in Food Service is designed to prepare students for transfer as juniors to a four-year program in food science. It is the basis of a transfer agreement that facilitates credit transfer from Normandale to the College of Food, Agriculture and Natural Resource Sciences (CFANS) at the University of Minnesota. Students who complete the AS may apply a minimum of 60 credits toward the bachelor's degree.

Food scientists and technologists use chemistry, microbiology, engineering, and other sciences to study the principles underlying the processing and deterioration of food; analyze food content; discover new food sources; make processed foods safe, palatable, and healthful; and determine the best ways to process, package, preserve, store and distribute food.

Core Courses - 30 Credits

□ FSCI 2100	Introduction to Food Science	3 cr
□ MATH 1080	Introduction to Statistics	4 cr
□ HLTH 1107	Principles of Nutrition	3 cr
□ CHEM 1061	Principles of Chemistry 1	5 cr
□ CHEM 1062	Principles of Chemistry 2	5 cr
□ CHEM 2061	Organic Chemistry 1	5 cr
□ CHEM 2062	Organic Chemistry 2	5 cr

Additional Required Courses - 30 Credits

☐ ENGC 1101	College Writing	4 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ MATH 1400	Survey of Calculus	4 cr
□ BIOL 1501	Principles of Biology 1	5 cr
□ PHYS 1121	Physics 1 for Scientists and	5 cr
	Engineers	

□ Complete 9 additional credits from MnTC Goal areas	9 cr
5, 6, 7, 8, 9 or 10 to reach 30 credits total in the MnTC	

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Food Science (AS) needs placement into college level for READ, WRITE (ENGC) and MATH 1510 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester Spring Semester ENGC 11014cr CHEM 1062.....5cr CHEM 1061.....5cr HLTH 11073cr MATH 14005cr COMM 11013cr **PHYS 1121.....5cr TOTAL TOTAL _____16cr 14cr.... **Fall Semester** Spring Semester CHEM 20615cr CHEM 2062......5cr BIOL 1501..... MATH1080, 1090, or 1095 4cr *MNTC GOAL 5, 6, 7, 8, 9 or 10..8cr TOTAL... 14cr TOTAL *See Catalog for elective credits to reach 30 MNTC credits **See Advisor for questions prerequisite for PHYS 1121



French - Associate of Arts Emphasis (AA) 60 Credits

Through the Normandale French program students work towards linguistic proficiency and cultural competence in a language spoken in over 50 countries. The study of French provides global insight as France's foundational contributions to political, scientific, and artistic thought continue to shape our world. The Normandale program focuses on both France and Francophone regions. Knowledge of French is useful in many professional fields, including international business, global health, and science.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ FREN 1111	French Culture and Civilization	3 cr
□ FREN 1200	Beginning French 2	5 cr
□ FREN 2100	Intermediate French 1	5 cr
□ FREN 2200	Intermediate French 2	5 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES	
	□ ENGC 1101 or	

□ COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING
(Met By Completion of All 40 Credits of The MnTC)

□ GOAL 3: NATURAL SCIENCES – 2 COURSES (Select from two different departments; at least one must include a lab)

	□ Course #1
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE □ Course
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES 2 COURSES

(Select from two different departments)

□ Course #1	
□ Course #2	

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

(Select from two different departments)

Course	#1	met l	by tak	ing re	equired	FREN	courses	ò
Course	#2							

GOAL 7:	HUMAN DIVERSITY - 1 COURSI
	□ Course

GOAL 8: GLOBAL PERSPECTIVE - 1 COURSE

☐ Course met by taking required FREN courses

GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT – 1 COURSE

Additional Course Requirements - 20 credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

French Emphasis (AA) needs placement into college level for READ, WRITE (ENGC) and FREN 1200 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.			
	Fall Semester	Spring Semester	
1st year	ENGC 1101	FREN 1200	
	Fall Semester	Spring Semester	
2nd year	FREN 2100	FREN 2200	
 If you are not starting at FREN 1200, we recommend that you o your academic advisor for a modified plan.			



Geography - Associate of Arts Emphasis (AA) 60 Credits

Completing an AA in Geography gives you the background to interpret the complex relationships between people and their environment. Geographers interpret patterns of social, economic, and political activity on Earth, as they seek to understand variations in those human/environment relationships. This program provides the foundation and skills to transfer to a fouryear institution to complete a degree and pursue a career in geography.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ GEOG 1101	Earth's Natural Environments	4 cr
□ GEOG 1102	Human Geography	3 cr

Complete at least two of the following seven courses for a total of at least 6 credits:

□ GEOG 1104	Resources, Society and Environment	3 cr
□ GEOG 1121	World Regional Geography	3 cr
□ GEOG 1125	Geography of the United States and Canada	3 cr
□ GEOG 1170	Cities	3 cr
□ GEOG 1172	Introductory Meteorology	4 cr
□ GEOG 1180	Cartography and Geographic Information Systems	3 cr
□ GEOG 1900	Topics in Geography	1-4 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES
	□ ENGC 1101
	□ COMM 1100 or 1101 or 1111 or 1121

CRITICAL THINKING GOAL 2: (Met by completion of all 40 credits of the MnTC)

NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must

include a la	b) □ Course #1 met by taking required GEOG courses □ Course #2
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select from	n two different departments) □ Course #1 met by taking required GEOG courses

HUMANITIES AND FINE ARTS- 2 COURSES (Select from two different departments)

□ Course #2 _____

□ Course #1	
□ Course #2	

	HUMAN DIVERSITY - 1 COURSE □ Course et by taking GEOG 1125 or GEOG 1170)
GOAL 8:	GLOBAL PERSPECTIVE – 1 COURSE □ Course met by taking required GEOG courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE □ Course et by taking GEOG 1170)
GOAL 10:	PEOPLE AND THE ENVIRONMENT – 1 COURSE □ Course met by taking required GEOG courses

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- □ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

3cr 3cr 3cr)3cr 3cr
3cr 3cr 3cr 3cr 3cr



German - Associate of Arts Emphasis (AA) 60 Credits

Through the German program at Normandale, students work toward linguistic proficiency and cultural competence in a language spoken by over 100,000,000 people in the world's fourth largest economy. Germany is the world's foremost country in developing and using cutting-edge green technology, the economic engine of the European Union and the US's second largest trading partner.

The study of German provides not just global insight, but a deep awareness and appreciation for the foundational contributions of the German-speaking areas in scientific, philosophical, political, humanitarian and artistic thought that have shaped, and continue to influence, our world. This program focuses not just on the German-speaking areas in Europe, but worldwide. Knowledge of German is useful in many professional fields, including international business, the sciences, green technology, the hospitality industry, music, and more. Emphasis requirements may also be used to satisfy the Minnesota Transfer Curriculum (MnTC) Goal requirements.

Required Courses Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below. □ GERM 1111 German Culture and Civilization 3 cr □ GERM 1200 Beginning German 2 5 cr □ GERM 2100 Intermediate German 1 5 cr □ GERM 2200 Intermediate German 2 5 cr General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits *See MnTC Curriculum for specific course options COMMUNICATION - 2 COURSES GOAL 1: □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121 **CRITICAL THINKING** (Met By Completion of All 40 Credits of The MnTC) □ GOAL 3: NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must include a lab) □ Course #1 _____ □ Course #2 _____ GOAL 4: MATHEMATICAL/LOGICAL REASONING -1 COURSE □ Course ___ HISTORY AND SOCIAL/BEHAVIORAL SCIENCES -GOAL 5: 2 COURSES (Select from two different departments) □ Course #1 _ □ Course #2 ___ **HUMANITIES AND FINE ARTS- 2 COURSES** (Select from two different departments) □ Course #1 met by taking required GERM □ Course #2 ___

HUMAN DIVERSITY - 1 COURSE

□ Course _____

GOAL 7:

GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course met by taking required GERM courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE

Additional Course Requirements - 20 credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

German Emphasis (AA) needs placement into college level for READ and WRITE (ENGC)			
Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.			
	Fall Semester	Spring Semester	
1st year	ENGC 1101	GERM 1200	
	Fall Semester	Spring Semester	
2nd year	GERM 2100	GERM 2200	
	lf you are not starting at GERM 1200, we recommend that you consult your academic advisor for a modified plan.		



Global Studies Certificate 18 Credits

The purpose of the Global Studies certificate is to offer educational opportunities for a student to become a productive, global citizen and future leader in the community, state, nation, and world. This certificate complements many academic fields and any career that benefits from a global perspective.

Required Courses - 18 Credits

□ COMM 1131	Intercultural Communication	3 cr
□ BUSN/HSMA	Business Practices in the	3 cr
2125	Global Market	

Complete at least **12 credits** from the following courses from a minimum of two departments:

minimum of two departments:			
□ ANTH/SOC 1101	Cultural Diversity	3 cr	
□ ANTH/SOC/	Women Across Cultures	3 cr	
WMST 1121			
□ BUSN 1130	Introduction to International	3 cr	
	Business		
□ GEOG 1121	World Regional Geography	3 cr	
□ HIST 1131	Family: Sex/Gender/Power:	3 cr	
	A Cross-Cultural, Historical		
	Perspective		
□ MUSC 1121	Introduction to World Music	3 cr	
□ PHIL 1140	Environmental Ethics	3 cr	
□ PHIL 1150	Introduction to World Religions	3 cr	
□ POLS 1150	Introduction to World Politics	3 cr	
	and Globalization		
□ THTR 2111	World Cinema	3 cr	
□ Topics Study Abroad Course (strongly recommended)			
□ CHIN, FREN, GERM, JAPN, SMLI			
or SPAN language o	course	5 cr	
□ MnTC Goal 8 course			

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Health Science Broad Field (AS) 60 Credits

This degree provides students a broad base of courses that fulfill the Minnesota Transfer Curriculum goals and prerequisite science courses that may be required to transfer to a baccalaureate degree in Health Sciences. The AS in Health Science Broad Field also provides the opportunity for students to be awarded two degrees, for example Nursing or Dental Hygiene and AS Health Science Broad Field.

Required Courses - 60 Credits

□ BIOL 1501	Principles of Biology 1	5 cr
□ BIOL 2041	Human Anatomy	4 cr
□ BIOL 2042	Human Physiology	4 cr
□ BIOL 2043	Microbiology	4 cr
□ CHEM 1050	Foundations of Organic and	3 cr
	Biochemistry	
□ COMM 1111	Interpersonal Communication	3 cr
□ ENGC 1101	College Writing	4 cr
□ HLTH 1107	Principles of Nutrition	3 cr
□ MATH 1100	College Algebra	4 cr
□ PHIL 1103	Ethics	3 cr
□ PSYC 1110	Introduction to Psychology	4 cr
□ PSYC 2210	Developmental Psychology:	4 cr
	Life Span	
□ SOC 1104	Introduction to Sociology	3 cr
Complete one of	the following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
□ Complete one	course from MnTC Goal 6, 8 or 10	3-5 cr
□ Complete an additional 4 credit CHEM course		4-5 cr

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Health Science Broad Field (AS) needs placement into college level for READ, WRITE (ENGC) and MATH Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Spring Semester ENGC 11014cr CHEM 1050......3cr CHEM 1020.....4cr MATH1080, 1090, or 1095 4cr MATH 11004cr BIOL 1501.....5cr COMM 11113cr HLTH 11073cr TOTAL _____15cr TOTAL ____15cr Fall Semester **Spring Semester** BIOL 2041......4cr BIOL 2042.....4cr PSYC 1110......4cr BIOL 2043.....4cr PHIL 1103.....3cr PSYC 22104cr MNTC GOAL 6, 8 or 104cr SOC 11043cr TOTAL 14cr TOTAL...



Healthcare Systems Technology (AAS) 60 Credits

This is a multidisciplinary program infused with the skills necessary to build a strong foundation in computer technology, health information technology and healthcare. More specifically, students in this program learn: software database design, data management, data privacy laws and regulations, work flow analysis and design, and healthcare and computer terminology. Additionally, graduates of this program have the knowledge to bridge the gap in communication between multiple departments within the organization.

Core Courses - 40 Credits

co.c cou.sc	5 TO CI CUITO	
□ COMT 1107	Introduction to Computer	4 cr
	Technology	
□ COMT 1173	PC Architecture Operation and	3 cr
	Interface	
□ COMT 1181	Database Management Systems	3 cr
□ COMT 1182	Advanced Database	3 cr
	Management Systems	
□ COMT 2188	Systems Analysis and Design	3 cr
□ COMT 2250	Object Oriented Programming	4 cr
	with Java for HCST	
□ CSCI 1101	Introduction to Computing and	4 cr
	Problem Solving	
□ HLTH 1010	Medical Terminology	3 cr
□ HLTH 2010	Healthcare in the US	3 cr
☐ HCST 2100	Introduction to Health	4 cr
	Information Technology	
□ HCST 2200	Privacy and Security in Health	2 cr
	Information Technology	
□ HCST 2300	Healthcare Systems Technology	4 cr
	Capstone	

Additional Required Courses - 20 Credits

Additional Re	equirea Courses - 20 Creaits	
□ ENGC 1101	College Writing	4 cr
Complete one of	the following two courses:	
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
Complete one of	the following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr
□ Complete at lea 6, 7, 8, 9 or 10	ast 9 credits from MnTC Goals 3, 5,	9 cr

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

nee Pro	ealthcare Systems Technolog eds placement into college level for RE ogram Sequence: The sequence is will take longer for part-time stude	AD, WRITE (ENGC) and MATH designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	HLTH 2010
	Fall Semester	Spring Semester
2nd year	COMT 1181 3cr HCST 2100 4cr COMT 2250 4cr MNTC GOAL 3, 5, 6, 7, 8, 9 or 10 3cr TOTAL 14cr	HCST 2200



History Transfer Pathway (AA) 60 Credits

The History Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated History bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

History prepares students to research, analyze, and present evidence with a range of oral and written styles.

Students will gain both a broad understanding of the past in U.S. and world history and an appreciation for diverse historical perspectives. The AA in history prepares students for careers that share the skills of historians, such as evaluating the credibility of information, analyzing a variety of data to tell a story, and presenting a coherent story from varied sources.

The skills and knowledge gained from an AA in history prepare students for a variety of careers, among them business, digital research, entertainment, government, law, healthcare, non-profit work, and teaching.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

GOAL 5

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

Complete three of the following four courses:

□ HIST 1111	United States History 1	4 cr
□ HIST 1112	United States History 2	4 cr
□ HIST 1101	History of World Civilizations 1	4 cr
□ HIST 1102	History of World Civilizations 2	4 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION - 2 COURSES

□ ENGC 1101

□ COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING

(Met By completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must include a lab)

□ Course #1 _____ □ Course #2 _____

GOAL 4: MATHEMATICAL/LOGICAL REASONING – 1 COURSE

MATH 1080 or MATH 1090 or MATH 1095 recommended unless student will pursue a Social Studies Education Licensure, in which case MATH 1100 is recommended. Students should check with their transfer institution for their recommendations or requirements.

□ Course

40/1L 01	2 COURSES
(Select from	n two different departments) □ Course #1 met by taking required HIST courses □ Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES a two different departments) □ Course #1 □ Course #2
GOAL 7:	HUMAN DIVERSITY – 1 COURSE □ Course met by taking required HIST courses
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course met by taking required HIST courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10: HIST 1133	PEOPLE AND THE ENVIRONMENT - 1 COURSE recommended

HISTORY AND SOCIAL /BEHAVIORAL SCIENCES -

Additional Course Requirements - 20 credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.

□ Course _

Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement. An additional history course is recommended, but this is not a requirement. Students should check with the receiving institution to understand how it will transfer; a fourth history course may transfer into the major program in history or it may transfer only as an elective toward the bachelor's degree.



History Transfer Pathway (AA), continued 60 Credits

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

History Transfer Pathway (AA) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. **Fall Semester Spring Semester** ENGC 1101......4cr HIST 1101 or 1102 (G5+8) 4cr COMM 1100,1101, 1111 *MNTC Goal 3 with lab.....4cr or 11213cr HIST 1111 or 1112 (G5+7)4cr MNTC Goal 5 (non HIST).....3cr *MNTC Goal 6.....3cr MATH 1080, 1090, 1095 EXSC elective1cr or 1100 (G4).....4cr TOTAL Fall Semester Spring Semester HIST 1111, 1112, 1101 HIST 1133 (G10)3cr or 11024cr *MNTC Goal 33cr HLTH elective......3cr Electives3cr *MNTC Goal 6......3cr Electives3cr MNTC Goal 93cr Electives2cr Elective3cr TOTAL 16cr *For MNTC Goal areas that require 2 courses, they must come from 2 different departments



Hospitality Management (AAS) 60 Credits

Normandale's hospitality management program prepares students to lead businesses in the hospitality, travel and tourism industry. The program concentrates on developing the interpersonal communication, conceptual-creative, leadership, technical and administrative skills needed to lead hospitality and tourism business towards current profitability and sustainability in the future.

Graduates in hospitality management go on to positions such as hotel general manager, conventions manager, event manager, rooms division director, housekeeping/maintenance director, hotel sales and marketing director, banquet/catering manager, restaurant/bar manager, casino operations, tourism manager, etc. Upon completion of a degree, students may go on to obtain a bachelor's degree in hospitality management or related programs.

Complementing the traditional degree program, the Hospitality Department offers five Certificate Programs designed for working adults. Students may also elect to complete one or more certificate concentrations and select courses to fulfill this requirement.

Normandale's Hospitality Management Program is nationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Core Courses - 32 Credits

□ BUSN 1107	Leadership in the Workplace	4 cr
□ HSMA 1103	Introduction to Hospitality and	4 cr
	Tourism Management	
□ HSMA 1162	Hotel/Lodging Management and	4 cr
	Operations	
□ HSMA 2144	Food/Beverage Management and	4 cr
	Cost Control	
□ HSMA 2150	Revenue Management in Hospitality	4 cr
	and Tourism	
□ HSMA 2172	Hospitality Sales and Marketing	4 cr
	Management	
□ HSMA 2173	Convention and Meeting Planning	4 cr
	Management	
□ HSMA 2096	Hospitality Management Internship	2-4 cr

Additional Required Courses - 29 Credits

Additional N	equired courses 23 circuits	
□ ACCT 2251	Financial Accounting	4 cr
□ ECON 2201	Principles of Microeconomics	3 cr
□ ENGC 1101	College Writing	4 cr
Complete one of	the following two courses:	
□ COMM 1101	5	3 cr
	Speaking	
□ COMM 1111	Interpersonal Communication	3 cr
- Complete et le	ant 2 gradita from MaTC Cool 6	3 cr
□ Complete at le	ast 3 credits from MnTC Goal 6	3 (1
□ Complete at le	ast 9 credits from MnTC Goal areas	
3, 4, 7, 8 or 10	*	8 cr
*Highly recomm	ended that students complete a MnTC G	Goal 3

^{*}Highly recommended that students complete a MnTC Goal 3 science course with lab if planning to transfer to a bachelor's degree program.

Complete one of the following seven courses:

□ BUSN 1130	Introduction to International	3 cr
DUON (OILA	Business	•
□ BUSN/CIM	Information Technology Concepts	3 cr
1201	and Business Software 1	
□ BUSN 1210	Exceptional Customer Service	3 cr
□ BUSN 2100	Human Relations and Effective	3 cr
	Teams	

□ BUSN 2155	Legal Environment of Business	3 cr
□ BUSN 2200	Human Resource Management	3 cr
□ HSMA 2125	Business Practices in the Global	3 cr
	Market	

BUSN 1201: Highly recommended for students planning to transfer to a bachelor's degree program.

Other Degree Requirements

If needed, complete additional courses to reach 60 collegelevel credits total.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Certificate Options

The department recommends that students complete courses which, when combined with the required courses above, lead to the achievement of a marketable hospitality certificate.

Нс	Hospitality Management (AAS)				
nee Pro	needs placement into college level for READ, WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.				
	Fall Semester	Spring Semester	Summer Semester		
1st year	ENGC 1101 4cr COMM 1101 or 11113cr ACCT 2251 4cr HSMA 1103 4cr TOTAL 15cr	HSMA 21444cr HSMA 21724cr ECON22013cr MNTC Goal 63cr TOTAL14cr	HSMA 21504cr TOTAL4cr		
	Fall Semester	Spring Semester			
2nd year	HSMA 11624cr HSMA 20964cr HSMA 21734cr MNTC electives from Goal 3, 4, 7, 8 or 103cr TOTAL15cr	HSMA 2097 or 2098 4cr BUSN 1130, 1201, 1210, 2100, 2155, 2200 or HSMA 2125 3cr MNTC electives from Goal 3, 4, 7, 8 or 10 3cr MOTC electives from Goal 3, 4, 7, 8 or 10 3cr			



□ HSMA 2173

Hotel Marketing and Sales Certificate __18-20 Credits

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

4 cr

Required Courses - 18-20 Credits □ HSMA 1103 Introduction to Hospitality and 4 cr **Tourism Management** Complete one of the following three courses: ☐ HSMA 2096 Hospitality Management 2-4 cr Internship □ HSMA 2097 Senior Hospitality Internship 4 cr □ HSMA 2098 International Internship 4 cr □ HSMA 2150 Revenue Management in 4 cr Hospitality and Tourism □ HSMA 2172 Hospitality Sales and Marketing 4 cr Management

Convention and Meeting

Planning Management

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Hotel Operations Certificate 18-20 Credits

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

Required Courses - 18-20 Credits □ HSMA 1103 Introduction to Hospitality and 4 cr **Tourism Management** □ HSMA 1162 Hotel/Lodging Management and 4 cr Operations □ HSMA 2144 Food/Beverage Management 4 cr and Cost Control □ HSMA 2172 Hospitality Sales and Marketing 4 cr Management Complete one of the following three courses: □ HSMA 2096 Hospitality Management 2-4 cr Internship □ HSMA 2097 Senior Hospitality Internship 4 cr □ HSMA 2098 International Internship 4 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Human Resource Management Certificate 18 Credits

Business Enrichment certificates may be completed by students working toward an AS or AAS in Business or as stand alone certificates. These certificate programs are designed for the student who wants new skills to obtain a better job, needs new skills for a job upgrade or promotion or wishes to gain management skills in their current career or to change careers. The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Human Resources Management Certificate.

Required Courses - 18 credits

□ BUSN 1145	Supervision	3 cr
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ BUSN 2100	Human Relations and	3 cr
	Effective Teams	
□ BUSN 2155	Legal Environment of	3 cr
	Business	
□ BUSN 2200	Human Resource	3 cr
	Management	
□ BUSN 2300	Principles of Management	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Individualized Studies (AS) 60 Credits

The Individualized Studies degree is ideal for working adults and/or students who have well-defined career goals and who wish to build their own program of study. In earning an Associate of Science degree, students have the opportunity to develop competencies in both distinct and emerging fields unavailable through existing degree programs. Students create an academic plan by combining complementary coursework from existing disciplines along with core Minnesota Transfer Curriculum requirements.

The program requires submission of a written degree plan initiated by the student with assistance from the dean of an appropriate division, or an academic counselor/faculty member. Students use a plan template to guide the degree planning process that they submit to the relevant academic dean's office. The approval of an industry representative must also be obtained when the degree plan applies to a specific career field. The plan must also demonstrate transferability to at least one four-year accredited institution, even when it may not be the intention of the student to transfer immediately upon degree completion.

Core Courses - 30 Credits

Select coursework from at least two discipline areas

□ Coursework from selected discipline area 1	9 cr
□ Coursework from selected discipline area 2	9 cr
☐ Additional courses to reach a minimum of	12 cr
□ 30 Specialized Program credits	

Note: Coursework will be determined in consultation with Normandale faculty and/or administration

Additional Required Courses - 30 Credits College Writing

□ ENGC 1101	College Writing	4 cr
Complete one of	the following three courses:	
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ COMM 1111	Interpersonal Communication	3 cr
□ COMM 1121	Small Group Communication	3 cr
□ Complete one	course from MnTC Goal 3 or 4	3 cr
□ Complete one	course from MnTC Goal 5	3 cr
□ Complete one	course from MnTC Goal 6	3 cr
□ Complete 6 cre MnTC Goals 7.	edits from two different of the following 8. 9 or 10	6 cr

□ Complete additional MnTC courses to reach a minimum of 30 MnTC Credits

Other Degree Requirements

- □ If needed, complete additional courses to reach 60 collegelevel credits total.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.



International Experience Certificate 14 Credits

The International Experience Certificate focuses on the development of knowledge in world languages, area studies, and intercultural competence, providing students with the skills they need to thrive in our international community and workforce both in Minnesota and around the globe.

Required Co	urses – 14 Credits Intercultural Communication	3 cr
Complete one 5 following: CHINESE	credit language course; choose fron	n the
□ CHIN 1100	Beginning Chinese 1	5 cr
□ CHIN 1200	Beginning Chinese 2	5 cr
□ CHIN 2100	Intermediate Chinese 1	5 cr
□ CHIN 2200	Intermediate Chinese 2	5 cr
FRENCH		
□ FREN 1100	Beginning French 1	5 cr
□ FREN 1200	Beginning French 2	5 cr
☐ FREN 2100	Intermediate French 1	5 cr
□ FREN 2200	Intermediate French 2	5 cr
GERMAN		
□ GERM 1100	Beginning German 1	5 cr
□ FREN 1200	Beginning French 2	5 cr
☐ FREN 2100	Intermediate French 1	5 cr
□ FREN 2200	Intermediate French 2	5 cr
JAPANESE		
□ JAPN 1100	Beginning Japanese 1	5 cr
□ JAPN 1200	Beginning Japanese 2	5 cr
□ JAPN 2100	Intermediate Japanese 1	5 cr
□ JAPN 2200	Intermediate Japanese 2	5 cr
SOMALI		
□ SMLI 1100	Beginning Somali 1	5 cr
□ SMLI 1200	Beginning Somali 2	5 cr
□ SMLI 2100	Intermediate Somali 1	5 cr
□ SMLI 2200	Intermediate Somali 2	5 cr
SPANISH		
□ SPAN 1100	Beginning Spanish 1	5 cr
□ SPAN 1200	Beginning Spanish 2	5 cr
□ SPAN 2100	Intermediate Spanish 1	5 cr
□ SPAN 2200	Intermediate Spanish 2	5 cr

Complete one 3 following:	credit culture course; choose from the	Э
□ CHIN 1111	Chinese Culture and Civilization	3 cr
□ FREN 1111	French Culture and Civilization	3 cr
☐ GERM 1111	German Culture and Civilization	3 cr
□ JAPN 1111	Japanese Culture and Civilization	3 cr
□ SMLI 1111	Somali Culture and Civilization	3 cr
□ SPAN 1111	Spanish Culture and Civilization	3 cr
•	credit world languages and cultures s	tudy
□ CHIN 1900	Topics/Study Abroad	3 cr
□ FREN 1900	Topics/Study Abroad	3 cr
□ SPAN 1900	Topics/Study Abroad	3 cr
Other Certif Earn a minim 2.0 for colleg and above) co	icate Requirements um cumulative grade point average (Gelevel coursework (courses numbered ompleted at Normandale. one third of the required certificate cre	GPA) of d 1000



Law Enforcement Transfer Pathway (AS) 68 Credits

The Law Enforcement Transfer Pathway (AS) offers students a powerful option; the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Law Enforcement bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field

This program is designed to prepare students to be eligible to take the Minnesota Peace officer Licensing Exam and eventually enter police work. Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

3 cr

Core Courses - 46-47 Credits

Courses marked with an asterisk (*) are prerequisite for admission to the Law Enforcement Education Center (LEEC), must be completed with a minimum grade of C in each course, and require a minimum combined GPA of 2.5.

Internercenal Communication	3 cr
	3 CI
College Writing	4 cr
Business and Technical Writing	3 cr
Fitness for Life I	2 cr
Emergency Medical Responder	3 cr
Ethics	3 cr
Introduction to Psychology	4 cr
Introduction to Sociology	3 cr
Families in Crisis	3 cr
Introduction to Criminal Justice	3 cr
Juvenile Justice	3 cr
Police and Community	3 cr
an Caller Stand Land	
	Fitness for Life I Emergency Medical Responder Ethics Introduction to Psychology Introduction to Sociology Families in Crisis Introduction to Criminal Justice Juvenile Justice

Complete one of the following two courses:

1101 □ SOC 2110	American Minority Relations	3 cr
Complete one of th	e following two courses: Constitutional Law	3 cr

Cultural Diversity

□ POLS 2250	Constitutional Law	3 cr
□ PSYC 2200	Abnormal Psychology	3 cr
Complete one cours	se from MnTC Goal 4	3-4 cr

Additional Required Courses -22 Credits

Courses below will be taken over two semesters at LEEC. Criminal Investigation

Semester 1		
	LAWE 2225	

□ SOC/ANTH

□ LAWE 2225 □ LAWE 2230 □ LAWE 2231 □ LAWE 2235 □ LAWE 2241	Criminal Investigation Legal Issues in Law Enforcement Minnesota Criminal and Traffic Codes Police Report Writing/Interview Police Response and Human Behavior	3 cr 3 cr 3 cr 2 cr 3 cr
Semester 2	In Dragges Paspaneas	2 or

□ LAWE 2261 II	n Progress Responses	2 cr
□ LAWE 2275 T	raffic	1 cr
□ LAWE 2280 □	Defensive Tactics	2 cr
□ LAWE 2285 C	Crime Scene and Evidence	1 cr
□ LAWE 2290 F	Firearms	2 cr
□ LAWE 2300 T	actical Driving for Law Enforcement	0

Additional Requirements to Take the POST Examination

Completion of an Emergency Medical Response or EMT course is required prior to taking the licensing exam. HLTH 2209 fulfills this requirement. Students with current certification may petition completion of the requirement and substitute another 3 credit course for HLTH 2209. NOTE: A successful petition will not affect the 68 credit requirement for the Associate of Science degree.

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

nee Pro	w Enforcement Transfer Pat eds placement into college level for RE ogram Sequence: The sequence is vill take longer for part-time stude	AD and WRITE (ENGC) designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	ENGC 2102 3cr PSYC 1110 4cr SOC 2114 3cr SOC 1101 or 2100 3cr HLTH 2209 3cr TOTAL 16cr
	Fall Semester	Spring Semester
2nd year	SOC 2131 3cr SOC 2132 3cr POLS 2250 or PSYC 2200 3cr PHIL 1103 3cr COMM 1111 3cr TOTAL 15cr	LAWE 2225 3cr LAWE 2230 3cr LAWE 2231 3cr LAWE 2231 2cr LAWE 2235 2cr LAWE 2241 3cr TOTAL 14cr
	Fall Semester	
3rd year	LAWE 2261	*LAWE courses take place at LEEC



Law Enforcement Certificate 30-31 Credits

This certificate is designed to prepare graduates for police work. The Certificate in Law Enforcement is designed for students who already have completed either an associate or bachelor's degree at an accredited college or university.

Coursework in practical skills is offered at the Law Enforcement Education Center (LEEC). For more information on LEEC, call 763-657-3700.

3 cr

4 cr

Required Courses - 30-31 Credits

Courses marked with an asterisk (*) are prerequisite for admission to the Law Enforcement Education Center (LEEC), must be completed with a minimum grade of C in each course, and require a minimum combined GPA of 2.5.

□ ENGC 1101*	College Writing	4 cr	
□ ENGC 2102*	Business and Technical Writing	3 cr	
□ EXSC 1129	Fitness for Life I	2 cr	
□ SOC 1104*	Introduction to Sociology	3 cr	
□ SOC 2110	American Minority Relations	3 cr	
□ SOC 2114*	Families in Crisis	3 cr	
□ SOC 2130*	Introduction to Criminal Justice	3 cr	
□ SOC 2131*	Juvenile Justice	3 cr	
□ SOC 213*	Police and Community	3 cr	
Complete one of the following two courses:			

Professional Licensing Core Courses

□ PSYC 1100

□ PSYC 1110*

Completion of this certificate prepares students to apply to LEEC where they will be able to take coursework required to become a licensed police officer.

Psychology in Modern Life

Introduction to Psychology

Courses below will be taken over two semesters at LEEC.

□ LAWE 2225	Criminal Investigation	3 cr	
□ LAWE 2230	Legal Issues in Law Enforcement	3 cr	
□ LAWE 2231	Minnesota Criminal and Traffic	3 cr	
	Codes		
□ LAWE 2235	Police Report Writing/Interview	2 cr	
□ LAWE 2241	Police Response and Human	3 cr	
	Behavior		
□ LAWE 2261	In Progress Responses	2 cr	
□ LAWE 2275	Traffic	1 cr	
□ LAWE 2280	Defensive Tactics	2 cr	
□ LAWE 2285	Crime Scene and Evidence	1 cr	
□ LAWE 2290	Firearms	2 cr	
□ LAWE 2300	Tactical Driving for Law	0	
	Enforcement		

Additional Requirements to Take the POST Examination

 Completion of a First Responder, Emergency Medical Response or EMT course is required prior to taking the licensing exam. HLTH 2209 fulfills this requirement.

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Management Certificate 18 Credits

Business Enrichment certificates may be completed by students working toward an AS or AAS in Business or as stand alone certificates. These certificate programs are designed for the student who wants new skills to obtain a better job, needs new skills for a job upgrade or promotion or wishes to gain management skills in their current career or to change careers. The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Management Certificate.

Required Courses - 18 Credits

□ BUSN 1145	Supervision	3 cr
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ BUSN 1210	Exceptional Customer Service	3 cr
□ BUSN 2100	Human Relations and	3 cr
	Effective Teams	
□ BUSN 2155	Legal Environment of	3 cr
	Business	
□ BUSN 2300	Principles of Management	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Marketing Certificate 18 Credits

Business Enrichment certificates may be completed by students working toward an AS or AAS in Business or as stand alone certificates. These certificate programs are designed for the student who wants new skills to obtain a better job, needs new skills for a job upgrade or promotion or wishes to gain management skills in their current career or to change careers. The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Marketing Certificate.

Required Courses - 18 Credits

□ BUSN 1102	Social Media Marketing	3 cr
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ BUSN 1210	Exceptional Customer Service	3 cr
□ BUSN 2155	Legal Environment of	3 cr
	Business	
□ BUSN 2252	Professional Selling	3 cr
□ BUSN 2400	Principles of Marketing	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Mathematics Transfer Pathway (AA) 60 Credits

The Mathematics Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Mathematics bachelor's degree programs at Minnesota State universities.* The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

*Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ MATH 1510	Calculus 1	5 cr
□ MATH 1520	Calculus 2	5 cr
□ MATH 2510	Calculus 3: Multivariable	5 cr
	Calculus	
□ MATH 2520	Calculus 4: Differential	5 cr
	Equations with Linear Algebra	

General Education/Minnesota Transfer Curriculum (MnTC) -40 Credits

*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION - 2 COURSES

□ ENGC 1101

□ COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING

(Met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must include a lab)

□ Course #1 _____ □ Course #2 _____

GOAL 4: MATHEMATICAL/LOGICAL REASONING -

1 COURSE

□ Course met by taking required MATH courses

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES -

2 COURSES

(Select from two different departments)

□ Course #1 _____ □ Course #2 ____

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

(Select from two different departments)

□ Course #1 _____ □ Course #2 _____

GOAL 7: HUMAN DIVERSITY - 1 COURSE

□ Course _____

GUAL 8:	□ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE

OLOBAL DEPODEOTIVE 4 COURSE

GOAL 10: PEOPLE AND THE ENVIRONMENT - 1 COURSE

□ Course _____

Additional Course Requirements - 20 Credits

□ One Health (HLTH) course.

□ One Exercise Science (EXSC) course.

□ Elective credits – additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

Mathematics Transfer Pathway (AA) needs placement into college level for READ, WRITE (ENGC) and MATH 1510 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester **Spring Semester** ENGC 11014cr MATH 15205cr *MNTC Goal 3 with lab......4cr COMM 1100.1101.1111 or 11213cr *MNTC Goal 5.....3cr MATH 15105cr *MNTC Goal 6.....3cr *MNTC Goal 5......3cr TOTAL Fall Semester **Spring Semester** MATH 25105cr MATH 25205cr *MNTC Goal 3......3cr MNTC Goal 83cr *MNTC Goal 6......3cr MNTC Goal 103cr MNTC Goal 73cr HLTH elective......3cr EXSC elective1cr MNTC Goal 93cr *For MNTC Goal areas that require 2 courses, they must come from 2 different departments Some MNTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.



The Associate of Fine Arts degree in Music provides a high-quality two-year curriculum that completes the first two years of a baccalaureate degree in music. Upon completion, students will be able to demonstrate comprehension of harmonic analysis, fourpart voice-leading, transposition, aural intervallic and chord identification, melodic and rhythmic dictation, solmization, history of western art music, fundamental piano proficiency, solo and ensemble performance, and instrumental or vocal facility through applied study with artist-level faculty.

The AFA in Music prepares a student for transfer into the third year of a baccalaureate music program, in particular, those students pursuing a four-year degree in music performance, music education, or music therapy.

The Music Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Music.

3 cr

2 cr

2 cr

4 cr

Core Courses - 38 Credits □ MUSC 1131 Music Theory 1 □ MUSC 1132 Music Theory 2

□ MUSC 2281

□ MUSC 2282

□ ENGC 1101

□ COMM 1121

3 cr □ MUSC 2231 Music Theory 3 3 cr Music Theory 4 □ MUSC 2232 3 cr □ MUSC 1181 Ear Training 1 2 cr □ MUSC 1182 Ear Training 2 2 cr

Ear Training 3

Ear Training 4

- □ MUSC 1151 Applied Music 1 2 cr (Complete MUSC 1151 in two different semesters for a total of 4 credits)
- □ MUSC 2251 Applied Music 2 2 cr (Complete MUSC 2251 in two different semesters for a total of 4 credits)
- □ MUSC 1152 Performance Class 0 cr (Complete MUSC 1152 four times in four different semesters)
- □ MUSC 1159 Piano Proficiency 0 cr□ MUSC 2245 Music History 1 3 cr □ MUSC 2246 Music History 2 3 cr

Complete one of the following Music Ensemble Courses in four different semesters for a total of 4 credits:

□ MUSC 1113	Concert Choir	1 cr
□ MUSC 1116	Concert Band	1 cr
□ MUSC 1118	Orchestra	1 cr

Additional Required Courses - 30 Credits College Writing

Complete one of	the following four courses:	
□ COMM 1100	Introduction to Communication	3 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ COMM 1111	Interpersonal Communication	3 cr

□ Complete a minimum of 23 credits from at least three of the following MnTC Goals 3, 5, 7, 9 or 10.

Small Group Communication

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.
- □ Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Music (AFA) needs placement into college level for READ, WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. **Fall Semester Spring Semester** ENGC 11014cr MUSC 1132.....3cr MUSC 1131.....3cr MUSC 1182.....2cr MUSC 1181.....2cr MUSC 1151.....2cr MUSC 1152.....0cr MUSC 1151.....2cr MUSC 1113, 1116 or 1118.....1cr MUSC 1152.....0cr MUSC 1113, 1116 or 1118.....1cr MUSC 22463cr MUSC 2245.....3cr COMM 1100, 1101, 1111 *MNTC GOAL 3, 5, 7, 9 or 10..3cr or 11213cr TOTAL 18cr *MNTC GOAL 3, 5, 7, 9 or 10..3cr TOTAL17-18cr Fall Semester **Spring Semester** MUSC 2231.....3cr MUSC 2232.....3cr MUSC 2281.....2cr MUSC 2282......2cr MUSC 2251.....2cr MUSC 2251.....2cr MUSC 1152......0cr MUSC 1113, 1116 or 1118.....1cr MUSC 1152.....0cr MUSC 1113/1116/1118.....1cr MUSC 1159......0cr *MNTC GOAL 3, 5, 7, 9 or 10 ...3cr *MNTC GOAL 3, 5, 7, 9 or 10..3cr TOTAL ... *Complete a minimum of 23cr from at least three of the following MNTC GOALS 3, 5, 7, 9 or 10



The Normandale Nursing Department educates students to become entry-level professional nurses who are prepared to begin their careers as competent, caring members of today's health care team. The Normandale Nursing program has adopted the Minnesota Alliance for Nursing Education (MANE) curriculum which is a collaboratively-developed curriculum designed to remove barriers for students wishing to obtain their baccalaureate degree in nursing (BSN). Normandale offers five semesters of an eight semester BSN program. Students admitted to Normandale's Nursing program will be dually admitted to Metropolitan State University's Nursing program.

Normandale students will receive their associate of science degree following successful completion of the fifth semester of the program and may elect to take the National Council Licensure Examination (NCLEX) for Registered Nurse Licensure. Students will have the opportunity to complete the remaining three semesters of the MANE BSN curriculum as Metropolitan State University students. This program is committed to quality, integrity, active life-long learning, student success, alliances and community service.

Students entering the nursing program are expected to meet the Minnesota State Performance Standards for Entry-Level Nursing Programs, which are available on the Non-academics Requirements page on the Nursing department website. These performance standards are required abilities for effective performance in Minnesota State nursing education programs. The standards are compatible with the scope of practice as defined by the Minnesota Board of Nursing. The examples show how a standard may be applied in entry-level nursing education programs. The examples listed are for illustrative purposes only and are not intended to be a complete list of all tasks in an entry-level nursing program.

Reasonable accommodations for meeting standards may be available for otherwise program-qualified individuals with disabilities. Information is available in the Office for Students with Disabilities at 952-358-8625.

Normandale's nursing program is approved by the Minnesota Board of Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Rd NE, Suite 850, Atlanta, Georgia 30326. Contact at 404-975-5000 or online at ACENursing.org

			□ NURS 2910	Acute and Complex Care	7 cr
Core Course	es – 35 Credits		□ NURS 2920	Applied Pathophysiology for	2 cr
(Students alread	dy holding LPN licensure are required to	take		Nursing 2	
30 nursing cred	its)		□ NURS 2950	Nursing Leadership I	3 cr
All courses mus	t be complete with a grade of C or higher	r.	A 1 11.1 1 E		
Complete one o	f the following two courses:		Additional R	Required Courses - 40 Credits	
□ NURS 2700	Health Promotion and the Role of	9 cr	All courses must	t be complete with a grade of C or higher.	
2.10.10 2.00	the Professional Nurse (For	.	□ ENGC 1101	College Writing	4 cr
	general nursing students)		□ COMM 1111	Interpersonal Communication	3 cr
□ NURS 2720	Transition to the Role of the	4 cr	□ CHEM 1050	Foundations of Organic and	3 cr
□ NONO 2720	Professional Nurse (For students	4 01		Biochemistry	
	who have a current			Or	
	unencumbered Licensed		CHEM 1061	Principles of Chemistry 1	5 cr
	Practical Nurse (LRN) license – 5		□ BIOL 2041	Human Anatomy	4 cr
	credits of LPN Advanced		□ BIOL 2042	Human Physiology	4 cr
	Standing Credits will be granted)		□ BIOL 2043	Microbiology	4 cr
	Standing Credits will be granted)		□ PSYC 1110	Introduction to Psychology	4 cr
Complete the fo	llowing courses:		□ PSYC 2210	Developmental Psychology:	4 cr
□ NURS 2750	Nutrition and the Role of the	2 cr		Life Span	
	Professional Nurse		0	·	
□ NURS 2800	Chronic and Palliative Care	7 cr		f the following two courses:	•
□ NURS 2820	Pharmacology and the Role of the	3 cr	□ SOC 1104	Introduction to Sociology	3 cr
	Professional Nurse		□ ANTH 1127	Cultural Anthropology - The	3 cr
□ NURS 2850	Applied Pathophysiology for Nursing I	2 cr		Global Human Experience	
	Nulsing I				



Nursing (AS), continued 75 Credits

Complete one of the following two courses:

□ FUIL TT02	EUIICS	3 (1
□ PHIL 1180	Biomedical Ethics	3 cr
□ Complete 4 c	redits from MnTC Goal areas 4, 6, 7,	
8, 9 or 10		4 cr

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.
- Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Admission Requirements and Application Process

- Beginning Spring 2022, students will be admitted to the nursing program under Holistic Review. Visit the MANE website for more information on Holistic Review: https://manemn.org/home/prospective-students/
- Applicants who are new to Normandale must complete the online college application, found at www.normandaele.edu/apply. Acceptance to the college does not imply acceptance into the nursing program.
- The nursing program application deadlines are February 1 for fall and June 1 for spring the following year.
- Please see the nursing program website for application information for detailed application instructions.
- Students wishing to petition an exemption of admission requirements must do so prior to the application deadline.
- New students are encouraged to attend a college information session; current students should call 952-358-8261 to schedule a meeting with an advisor.
- Nursing information sessions are offered each semester.
 Visit our nursing website for session dates and locations.

Applicants must meet the following requirements before the application is processed:

- · High school graduation or GED.
- Complete semester one of the MANE curriculum plan: ENGC 1101, CHEM 1050 or CHEM 1061, BIOL 2041, and an elective in MnTC Goal 4, 6, 7, 8, 9, or 10.
- Have a GPA of 2.75 or higher in the semester one coursework shown above.

Complete the ATI TEAS pre-entrance exam. Visit
 Normandale's Nursing website or visit the ATI-TEAS testing page.

Submission of Nursing Program Application

Normandale's nursing program uses an online application that can be found at: https://manemn.org/home/prospective-students/

Admissions policies are subject to change. Applications will be accepted under the terms in place at the time an application is received by the Health Science Division. It is the responsibility of the student to keep up-to-date on any changes which may affect their qualifications for acceptance.

Application Deadlines

The application to the nursing program is February 1 for fall semester and June 1 for spring semester. The application and all required documents must be received on or before the due date.

Application Notification

Applicants will be notified in writing on or before March 15 for fall semester and July 15 for spring semester. Candidates will be instructed in their acceptance letter of the due date to accept or decline the admission offer. If a response is not received by the due date, the seat will be considered declined. Students who are not admitted must reapply to the nursing program the following cycle.

Professional Licensure/Certification Disclosure

The AS in Nursing prepares students to take the National Council Licensure Examination (NCLEX) for register nurse licensure in Minnesota.

Effective July 1, 2020 the U.S. Department of Education regulation 34 CFR 668.43 (a) (5) (v)) which requires our Associate Degree Program in Nursing to provide a <u>list of states</u> categorized by whether our curriculum:

- meets state educational requirements for professional licensure or certification;
- does not meet state educational requirements for professional licensure or certification;
- or where we have not made a determination of whether the curriculum meets educational requirements.

For additional information about states' requirements, please visit NursingLicensure.org. If you have questions, please contact the Health Sciences Enrollment Manager, HealthSciences@normandale.edu, 952-358-8417.





MANE Curri Community	culum Plan at Normandale College		□ NURS 2910 Acute and Complex Care 7 cr □ NURS 2920 Applied Pathophysiology for 2 cr
Semester 1 □ ENGC 1101 □ CHEM 1050	College Writing Foundations of Organic and Biochemistry Or	4 cr 3 cr	Nursing 2 □ NURS 2950 Nursing Leadership I 3 cr □ PHIL 1103 Ethics 3 cr Or □ PHIL 1180 Biomedical Ethics 3 cr
□ CHEM 1061 □ BIOL 2041 □ Elective Credit	Principles of Chemistry 1 Human Anatomy ts: 4 credits from MnTC Goals 4, 6, 7, 8, 9 or 10	5 cr 4 cr 4 cr	Note: Upon completion of Semester 5, students are eligible for the AS in Nursing and NCLEX-RN/licensure. Semester 6
Semester 2 □ PSYC 1110 □ BIOL 2042 □ BIOL 2043 □ COMM 1111 Semester 3	Introduction to Psychology Human Physiology Microbiology Interpersonal Communication	4 cr 4 cr 4 cr 3 cr	Metropolitan State University upper division coursework begins - 15 Credits □ NURS 406 Nursing Care of the Family 4 cr □ NURS 444 Evidence-Based Nursing 3 cr Practice □ General Education Statistics 4 cr □ General Education Writing in your Major 4 cr
□ NURS 2700	Health Promotion and the Role of the Professional Nurse (For general nursing students) Or	9 cr	General Education Statistics: (MATH 1080 or MATH 0990 STATWAY Statistics 1 & MATH 1090 STATWAY Statistics 2 or MATH 1095 STATWAY: Accelerated will fulfill this requirement)
NURS 2720	Transition to the Role of the Professional Nurse (For students who have a current unencumbered Licensed Practical Nurse (LPN) license – 5 credits of LPN Advanced Standing credits be granted)	4 cr	Semester 7 Upper division coursework 16 Credits □ HSCI 309 Global Health Issues 7 cr □ NURS 464 Nursing Leadership II 4 cr □ HSCI 446 Nursing Informatics 2 cr
□ NURS 2750	Nutrition and the Role of the Professional Nurse	2 cr	□ General Education-Upper Division Liberal 3 cr Science
□ PSYC 2210 Semester 4	Developmental Psychology: Life Span	4 cr	Semester 8 Upper division coursework 14 Credits
□ NURS 2800 □ NURS 2820	Chronic and Palliative Care Pharmacology and the Role of the Professional Nurse	7 cr 3 cr	□ NURS 490 Integrative Seminar and 10 cr Practicum (4 theory/3 clinical) □ General Education-Upper Division Liberal 4 cr
□ NURS 2850	Applied Pathophysiology for Nursing I	2 cr	Science
□ SOC 1104 □ ANTH 1127	Introduction to Sociology Or Cultural Anthropology The	3 cr 3 cr	
⊔ AINI∏ TT7/	Cultural Anthropology - The Global Human Experience	S UÍ	

Semester 5



Nursing Assistant Certificate 4 Credits

The Nursing Assistant Certificate course prepares individuals to assist others with personal care needs. This certificate course is approved by the Minnesota Department of Health (MDH) and prepares students to take the National Nursing Assistant Training and Competency Evaluation Test. Upon successful completion of the test, students are placed on the Minnesota Nursing Assistant Registry (NA/R).

The Nursing Assistant (NA/R) provides care under the direct supervision of licensed nurses. Employment is primarily in facilities caring for older adults. The demand for NA/Rs continues to grow due to our aging population.

Skills and knowledge obtained while earning the Nursing Assistant Certificate provide a strong foundation for individuals planning to pursue a career in healthcare.

Required Course

Complete one of the following two courses:

□ NURS 1057 Nursing Assistant Certificate 4 cr □ NURS 1060 Nursing Assistant/Home Health 4 cr

Aide

Other Certificate Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.

The following websites provide more information about nursing assistants, information about skills testing and links to the practice test and competency test brochure:

- The "Contacting the Nursing Assistant Registry" page on the Minnesota Department of Health website provides links to Registry forms, training and testing sites.
- ☐ The Pearson VUE website offers a test/skills brochure and a practice written test for Minnesota nursing assistants.



Required Courses

Philosophy - Associate of Arts Emphasis (AA) 60 Credits

The Associate of Arts Degree with Emphasis in Philosophy provides students with the opportunity to reflect on the most fundamental questions that concern human beings. Through careful study of major figures and traditions within philosophy, courses in this program will help students develop skills for reasoning and critical analysis, and encourage imagination, intellectual curiosity and rigor, personal reflection, and civic engagement.

Since the study of philosophy cultivates intellectual curiosity and imagination, and draws upon all areas of human endeavor, students who complete the emphasis will be prepared to transfer to a four-year institution in pursuit of many different majors. Philosophy majors are prepared for a wide variety of careers, including law, journalism, business, technology, and government and politics. Philosophy courses satisfy 6 of the 10 goals in the Minnesota Transfer Curriculum.

Incorporate Education/I	the following Required Courses into the Gener Minnesota Transfer Curriculum or Additional uirements sections below.	al
□ PHIL 110 □ PHIL 110 □ PHIL 110	2 Logic	3 cr 3 cr 3 cr
Complete o	O Introduction to World Religions O Philosophy of Art O Business Ethics	3 cr 3 cr 3 cr 3 cr 3 cr
Curricul	Education/Minnesota Transfer um (MnTC) - 40 credits Curriculum for specific course options	
GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121	
GOAL 2: (Met by com	CRITICAL THINKING npletion of all 40 credits of the MnTC)	
GOAL 3: (Select from include a la	□ Course #1	
GOAL 4:	□ Course #2 MATHEMATICAL/LOGICAL REASONING - 1 COURSE □ Course (can be met by taking PHIL 1102)	
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES 2 COURSES	; -
(Select from	□ Two Different Departments) □ Course #1 □ Course #2	
GOAL 6: (Select from	HUMANITIES AND FINE ARTS- 2 COURSES two different departments) Course #1 met by taking required PHIL cours Course #2	ses

GOAL 7:	□ Course
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE Course (can be met by taking PHIL 1150)
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course (can be met by taking PHIL 1103 or PHIL 1140 or PHIL 1170 or PHIL 1180)
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE Course (can be met by taking PHIL 1140)

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

	ogram Sequence: The sequence is vill take longer for part-time stude	
	Fall Semester	Spring Semester
1st year	ENGC 1101	PHIL 1102 (G4)
	Fall Semester	Spring Semester
2nd year	*MNTC Goal 3	PHIL 1150 (G6+8)



Physics – Associate of Arts Emphasis (AA) 60 Credits

Physics encompasses the study of the universe from the largest galaxies to the smallest subatomic particles and is the basis of many other sciences. Students who study physics develop a range of skills that can be applied in many areas, including: problem solving, with a pragmatic and analytical approach; constructing logical arguments; applying analytical skills; and grasping complex problems.

An Associate of Arts with Emphasis in Physics from Normandale provides students with fundamental knowledge of physics and mathematics that will ensure that they have the foundation and prerequisites to complete a bachelor's degree in physics at a transfer institution. In addition to the AA with Emphasis in Physics, the Physics Department at Normandale offers classes that fulfill requirements for students studying mathematics, the physical and biological sciences, engineering, and some health fields. All physics classes at Normandale fulfill Goal 3 (Natural Sciences) of the MnTC.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ MATH 2510	Calculus 3: Multivariable Calculus	5 cr
□ MATH 2520	Calculus 4: Differential Equations	5 cr
	with Linear Algebra	
□ PHYS 1121	Physics 1 for Scientists and	5 cr
	Engineers	
□ PHYS 1122	Physics 2 for Scientists and	5 cr
	Engineers	
□ PHYS 2250	Modern Physics	4 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES
	□ ENGC 1101
	□ COMM 1100 or 1101 or 1111 or 1121

GOAL 2: CRITICAL THINKING
(Met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES – 2 COURSES (Select from two different departments; at least one must include a lab)

□ Course #1 met by taking	g required
PHYS courses	
□ Course #2	

GOAL 4: MATHEMATICAL/LOGICAL REASONING -

1 COURSE

□ Course met by taking required MATH courses

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – 2 COURSES

(Select from two different departments)

□ Course #1	
□ Course #2	

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

(Select from two different departments)

□ Course #1	
□ Course #2	

GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course
GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- One Exercise Science (EXSC) course (EXSC 1129 is recommended).
- Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Pro	eds placement into college level for RE ogram Sequence: The sequence is will take longer for part-time stude	designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	MATH 1520
	Fall Semester	Spring Semester
2nd year	MATH 2510	MATH 2520



GOAL 2: CRITICAL THINKING
(Met by completion of all 40 credits of the MnTC)

Political Science Transfer Pathway (AA) 60 Credits

The Political Science Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Political Science bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Employers regard Political Science as one of the two most highly-prized social science degrees among employees. Why do employers desire students who study power and government and can hold national and international perspectives on topics? Because businesses, non-profit organizations, government, public service, law, media, education, and more need and admire the rare combination of knowledge, talent, and skills that Political Science students develop.

Political Science students uniquely combine wide-ranging knowledge with skills at research, analysis, and communication. These traits make students supremely qualified to work in the Information Age. Professional life increasingly requires collecting, organizing, applying, evaluating, and presenting information and ideas, as well as thinking critically, solving problems creatively, demonstrating cross-cultural understanding, and working individually and collaboratively.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Incorporate Education/	I Courses the following Required Courses into the Ger Minnesota Transfer Curriculum or Additional uirements sections below.		GOAL 3: (Select from include a la	
□ POLS 113		3 cr		□ Course #1 □ Course #2
Complete o		3 cr 3 cr	GOAL 4: MATH 1080	MATHEMATICAL/LOGICAL REASONING - 1 COURSE 0 or MATH 1090 or MATH 1095 recommended □ Course
Students m	ne of the following seven courses: ay take POLS 1132 or POLS 1150 (whicheve satisfy the required course above) Introduction to Comparative Politics	er was 3 cr	GOAL 5: 2 COURSES	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES – (Select from two different departments) □ Course #1 met by taking required POLS courses □ Course #2
□ POLS 113□ POLS 113□ POLS 115	Middle East Politics Introduction to Political Ideas	3 cr 3 cr 3 cr	GOAL 6: (Select from	HUMANITIES AND FINE ARTS- 2 COURSES two different departments) Course #1 Course #2
□ POLS 119 □ POLS 119 □ POLS 229	O5 Conflict and Negotiation	3 cr 3 cr 3 cr	GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course (can be met by taking POLS 1195)
Curricul	Education/Minnesota Transfer um (MnTC) - 40 Credits		GOAL 8:	GLOBAL PERSPECTIVE − 1 COURSE □ Course met by taking required POLS courses ETHICAL AND CIVIC RESPONSIBILITY − 1 COURSE □ Course met by taking required POLS courses
*See MnTC GOAL 1:	Curriculum for specific course options COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121		GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course



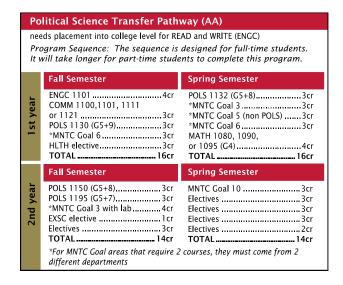
Political Science Transfer Pathway (AA), continued 60 Credits

Additional Course Requirements - 20 Credits

- $\hfill\Box$ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.





Psychology Transfer Pathway (AA) 60 Credits

The Psychology Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Psychology bachelor's degree programs at Minnesota State universities.

The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

The Pathway may not apply to schools outside of Minnesota State, including the University of Minnesota. Students intending to transfer to those schools should investigate the requirements at the receiving institutions. Part of the Pathway is to complete at least one elective course chosen from the extensive offerings of the Psychology Department.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

Course Requirements sections below.		
□ PSYC 1110	Introduction to Psychology	4 cr
□ PSYC 2100	Statistics for the Behavioral	4 cr
	Sciences	
Complete one of	the following three courses:	
□ PSYC 2200	Abnormal Psychology	3 cr
□ PSYC 2210	Developmental Psychology: Life Span	4 cr
□ PSYC 2600	Introduction to Social Psychology	3 cr
□ Complete one additional PSYC course		

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1: COMMUNICATION - 2 COURSES

□ ENGC 1101
□ COMM 1100 or 1111

GOAL 2: CRITICAL THINKING (Met by completion of all 40 credits of the MnTC)

GOAL 3: NATURAL SCIENCES – 2 COURSES (Select from two different departments; at least one must include a lab)

□ Course #1 BIOL _____ (must complete one Goal 3 BIOL course) □ Course #2

GOAL 4: MATHEMATICAL/LOGICAL REASONING - 1 COURSE

□ MATH 1080 or 1090 or 1095 or 1100

GOAL 5: HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES

(Select from two different departments)

□ Course #1 met by taking required PSYC courses
□ Course #2 ____

GOAL 6: HUMANITIES AND FINE ARTS- 2 COURSES

(Select from two different departments)

□ Course #1 PHIL _____ (must complete one Goal 6 PHIL course)
□ Course #2

GOAL 7: HUMAN DIVERSITY - 1 COURSE

Course met by taking required PSYC courses

GOAL 8: GLOBAL PERSPECTIVE - 1 COURSE

Course

GOAL 9: ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE

□ Course _____

GOAL 10: PEOPLE AND THE ENVIRONMENT – 1 COURSE

□ Course _____

Additional Course Requirements - 20 Credits

- $\hfill\Box$ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

Psychology Transfer Pathway (AA) needs placement into college level for READ, WRITE (ENGC) and MATH 1080 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester Spring Semester ENGC 11014cr COMM 1100 or 11113cr PSYC 2200, 2210 OR 2600 (G5+7)3cr *MNTC Goal 3 (non BIOL)3cr PSYC 1110 (G5).....4cr PHIL (G6).....3cr EXSC elective1cr *MNTC Goal 5 (non PSYC)3cr *MNTC Goal 6 (non PHIL)3cr HLTH elective.....3cr Spring Semester Fall Semester MATH 1080, 1090, PSYC 2100 (G5)......4cr or 1095 (G4).....4cr MNTC Goal 93cr BIOL with lab (G3)4cr MNTC Goal 103cr MNTC Goal 83cr Electives3cr PSYC elective3cr Electives3cr 14cr TOTAL..... *For MNTC Goal areas that require 2 courses, they must come from 2 different departments



The Associate of Science in Public Health is designed specifically for students to transfer to the appropriate upper-level college or university of their choice, where they can complete a BAS or BS degree. As such, the program provides core courses in Public Health and general education requirements that would be included in the first two years of study at four-year institutions. The degree program provides students with foundational knowledge in public health. Public health professionals work within a variety of settings including state and local health departments, hospitals, workplace wellness programs, government agencies, educational institutions, research organizations, and international development agencies.

Core Course	s – 25 Credits	
□ HLTH 2010	Healthcare in the US	3 cr
□ HLTH 2011	Introduction to Public Health	3 cr
Complete one of	the following two courses:	
□ HLTH 1104	Personal and Community Health or	3 cr
□ CHWN 1500	The Community Health Worker: Health Promotion Competencies	5 cr
Complete one of	the following two courses:	
□ HLTH 2012	Public Health Advocacy and Leadership	3 cr
□ CHWN 1000	The Community Health Worker: Role, Advocacy, Outreach, and Resources and	3 cr
□ CHWN 1200	Documentation, Legal, and Ethical Issues in Community Health Work	3 cr
Complete 8-13 c	redits from the following ten:	
□ HLTH 2105	Women's Health	3 cr
□ HLTH 1106	Drug Use and Abuse	3 cr
□ HLTH 1118	Stress Management	3 cr
□ HLTH 1010	Medical Terminology	3 cr
□ HLTH 1107	Principles of Nutrition	3 cr
□ CHWN 1100	Cultural Health Communication, Teaching, and Capacity Building	3 cr
□ CHWN 2096	Community Health Worker Navigator Internship	2 cr
□ EXSC xxxx	Exercise Science elective	1 cr
□ HLTH 1112	CPR for the Professional Rescuer	1 cr
□ HLTH 1103	College First Aid and Adult CPR	2 cr

Pu	Public Health Education (AS)			
needs placement into college level for READ, WRITE (ENGC) and MATH 1080 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.				
	Fall Semester	Spring Semester		
1st year	HLTH 1104 (1st 8 weeks)3cr HLTH 2011 (2nd 8 weeks)3cr CHEM 10204cr ENGC 11014cr TOTAL14cr	HLTH 1107		
	Fall Semester	Spring Semester		
2nd year	BIOL 2041	HLTH 2010 (1st 8 weeks)3cr HLTH 2012 (2nd 8 weeks)3cr HLTH electives6cr BIOL 20424cr TOTAL16cr		

Additional Required Courses - 35 Credits

□ ENGC 1101	College Writing	4 cr
□ BIOL 2041	Human Anatomy	4 cr
□ BIOL 2042	Human Physiology	4 cr
□ CHEM 1020	Introductory Chemistry	4 cr
□ CHEM 1050	Foundations of Organic and	3 cr
	Biochemistry	
□ COMM 1131	Intercultural Communication	3 cr
□ COMM 1101	Fundamentals of Public Speaking	3 cr
□ POLS 1130	Introduction to U.S. Politics	3 cr
□ SOC 1104	Introduction to Sociology	3 cr
Complete one of t	he following three courses:	
□ MATH 1080	Introduction to Statistics	4 cr
□ MATH 1090	STATWAY Statistics 2	4 cr
□ MATH 1095	STATWAY Statistics: Accelerated	4 cr

Other Degree Requirements

- If needed, complete additional courses to reach 60 college-level credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Public Health Education (AS)- completing CHWN Certificate along with AS in Public Health degree needs placement into college level for READ, WRITE (ENGC) and MATH 1080 Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester **Spring Semester** CHWN 15005cr ENGC 1101.....4cr CHWN 10003cr CHWN 20962cr CHWN 11003cr CHEM 1020.....4cr CHWN 12003cr POL 1130.....3cr COMM 11013cr TOTAL _____14cr TOTAL -Fall Semester Spring Semester BIOL 2041.....4cr BIOL 2042.....4cr CHEM 1050......3cr COMM 11313cr HLTH 20113cr HLTH 11073cr HLTH and/or EXSC elective.....3cr MATH 10804cr TOTAL ... SOC 11043cr TOTAL...



Religious Studies Certificate 15-17 Credits

The Religious Studies Certificate is designed for students who desire a concentrated course of academic study in the field of religious studies. Students will gain knowledge of the beliefs, practices, history, struggles, and influences of various religious and spiritual traditions from the perspectives of a variety of academic disciplines. Courses are rigorous and personally enriching. Religious studies address some of the most fundamental and enduring sources of meaning and community, as well as conflict and misunderstanding in human history. Students will gain knowledge of many types of belief and practice communities. Through completing this certificate, students will demonstrate a sustained exploration and appreciation of people's strongly diverse religious beliefs and behaviors.

Required Courses – 15-17 Credits Complete three of the following four courses:

□ ANTH 1188 Magic, Witchcraft and Religion: 3 cr The Anthropology of Religion □ PHIL 1150 Introduction to World Religions 3 cr □ PSYC 2400 Psychology of Religion and 3 cr Spirituality □ PHIL 1105 Philosophy of Religion 3 cr

Complete two of the following ten courses:

	8	
□ ANTH 1150	Native American Voices	3 cr
□ ANTH 1899	Medical Anthropology: Health,	3 cr
	Illness and Healing Across	
	Cultures	
□ ART 1102	Foundation Art History	3 cr
□ ART 1105	Non-Western Art Survey	3 cr
□ ENGL 1175	Myths and Legends	3 cr
□ GEOL 1050	Earth History	4 cr
□ HIST 1101	History of World Civilizations 1	4 cr
□ HIST 1102	History of World Civilizations 2	4 cr
□ MUSC 1121	Introduction to World Music	3 cr
□ PSYC 1108	Psychology of Death and Dying	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Small Business Management Certificate 18 Credits

Business Enrichment certificates may be completed by students working toward an AS or AAS in Business or as stand-alone certificates. These certificate programs are designed for the student who wants new skills to obtain a better job, needs new skills for a job upgrade or promotion or wishes to gain management skills in their current career or to change careers. The Higher Learning Commission has extended Normandale's accreditation to include online delivery of the Small Business Management Certificate.

Required Courses - 18 Credits

□ BUSN 1125	Entrepreneurship	3 cr
□ BUSN/CIM	Information Technology	3 cr
1201	Concepts and Business	
	Software 1	
□ BUSN/CIM	Business Problem Solving	3 cr
1220	Analyzing - Excel	
□ BUSN 2155	Legal Environment of Business	3 cr
□ BUSN 2310	Small Business Management	3 cr
□ BUSN 2400	Principles of Marketing	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn at least one third of the required certificate credits from Normandale.



Required Courses

Sociology Transfer Pathway (AA) 60 Credits

The Sociology Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Sociology bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Incorporate Education/	T Courses the following Required Courses into the Gener Minnesota Transfer Curriculum or Additional ruirements sections below. Introduction to Sociology	ra <i>l</i> 3 cr	
Complete o SOC 1102 SOC 1116	,	3 cr 3 cr	
Complete o SOC 1109 SOC 1119 SOC 2110	5 Sociology of Sex and Gender Roles	3 cr 3 cr 3 cr	
Curricul	General Education/Minnesota Transfer Curriculum (MnTC) – 40 Credits *See MnTC Curriculum for specific course options		
GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121		
GOAL 2: (Met by con	CRITICAL THINKING npletion of all 40 credits of the MnTC)		
GOAL 3: (Select from include a la	NATURAL SCIENCES - 2 COURSES to two different departments; at least one must b) Course #1 Course #2		
GOAL 4: 1 COURSE MATH 1080	MATHEMATICAL/LOGICAL REASONING - or MATH 1090 or MATH 1095 recommended □ Course		
GOAL 5: 2 COURSES (Select from	,		
GOAL 6: (Select from	HUMANITIES AND FINE ARTS- 2 COURSES two different departments) Course #1 Course #2		
GOAL 7:	HUMAN DIVERSITY - 1 COURSE		

□ Course met by completing required SOC courses

GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course (can be met by completing SOC 2116)
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- $\hfill\Box$ Earn a minimum of 15 college-level credits at Normandale.

Sociology Transfer Pathway (AA) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
	Fall Semester	Spring Semester
1st year	ENGC 1101	SOC 1109, 1115 or 2110 (G5+7)
	Fall Semester	Spring Semester
2nd year	SOC 1116 (G5+9)	MNTC Goal 10



Spanish Transfer Pathway (AA) 60 Credits

The Spanish Transfer Pathway AA offers students a powerful option: the opportunity to complete an Associate of Arts degree with course credits that directly transfer to designated Spanish bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ SPAN 1100	Beginning Spanish 1	5 cr
□ SPAN 1200	Beginning Spanish 2	5 cr
□ SPAN 2100	Intermediate Spanish 1	5 cr
□ SPAN 2200	Intermediate Spanish 2	5 cr

General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits

*See MnTC Curriculum for specific course options

GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121
GOAL 2:	CRITICAL THINKING
(Met by con	noletion of all 40 credits of the MnTC)

G (5 ir

GOAL 3:	NATURAL SCIENCES – 2 COURSES
(Select from	two different departments; at least one must
include a lal	b)
	□ Course #1 □ Course #2
GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
(Select from	two different departments) □ Course #1 □ Course #2
	HUMANITIES AND FINE ARTS- 2 COURSES two different departments) Course #1 met by taking required SPAN courses Course #2

HUMAN DIVERSITY - 1 COURSE

GLOBAL PERSPECTIVE - 1 COURSE

□ Course met by taking required SPAN courses

□ Course ____

GOAL 7:

GOAL 8:

GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements -20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement (SPAN 1111 is recommended).

Other Degree Requirements

- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.

Pro	anish Transfer Pathway (AA) ds placement into college level for RE Igram Sequence: The sequence is vill take longer for part-time stude	AD and WRITE (ENGC) designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	SPAN 1200
	Fall Semester	Spring Semester
2nd year	SPAN 2100	SPAN 2200
	*For MNTC Goal areas that require 2 different departments	courses, they must come from 2
	Some MNTC courses meet 2 different degree can be completed in 60 credit	
	If you are not starting at SPAN 1100	we recommend that you consult with





The goal of the Spanish Certificate is to provide students with the opportunity to acquire linguistic skills, cultural knowledge and intercultural competence necessary to work in an increasingly global community. This certificate complements many academic fields and careers in which students would benefit from an international perspective.

Required Courses - 13 Credits □ SPAN 2100 Intermediate Spanish 1 5 cr □ SPAN 2200 Intermediate Spanish 2 5 cr Complete one of the following two courses: □ SPAN 1111 Spanish Culture and Civilization 3 cr □ SPAN 2210 Advanced Communication Skills 3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Special Education Foundations Transfer Pathway (AS) | 60 Credits

The Special Education Foundations Transfer Pathway AS offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Special Education bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Minnesota State University, Mankato offers the Bachelor of Science program in Special Education on the Normandale Community College campus.

Individuals who have been arrested, charged or convicted of any criminal offense should investigate the impact that the arrest, charge or conviction may have on their chances of employment in the field they intend to study or on their chances to obtain federal, state and other higher education financial aid.

Required Courses

Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below.

□ COMM 1101	Fundamentals of Public Speaking	3 cr
	Grade of B or higher is required	
□ EDUC 1101	Introduction to Education	4 cr
	Grade of C or higher is required	
□ EDUC 2101	Educational Technology	3 cr
□ EDUC 2222	Multicultural Education and Human	3 cr
	Relations in Schools	
□ EDUC 2331	Professional Practice and Design of	2 cr
	Individual Education Programs	
□ EDUC 2408	Individuals with Diverse and	4 cr
	Exceptional Needs	
□ EDUC 2409	Learning and Human Development	4 cr
	for Diverse Learners	
□ ENGC 1101	College Writing	4 cr
	Grade of B or higher is required	
□ MATH 1055	Elements of Mathematics 1	4 cr
□ PSYC 1109	Child and Adolescent Development	3 cr
	Grade of C or higher is required	

Grade of B or higher is required in COMM 1101 and ENGC 1101

General Education/Minnesota Transfer Curriculum (MnTC) - 40 credits

*See MnTC Curriculum for specific course options
The department recommends the following courses for
completion of MnTC:

GOAL 1:	COMMUNICATION - 2 COURSES □ ENGC 1101 □ COMM 1101
	CRITICAL THINKING npletion of all 40 credits of the MnTC)
Select fron nclude a la	NATURAL SCIENCES - 2 COURSES n two different departments; at least one must b) and PHYS 1001 & PHYS 1002 recommended Course #1 Course #2
GOAL 4:	MATHEMATICAL/LOGICAL REASONING – 1 COURSE Course met by completing required MATH course
GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
Select fron	n two different departments)
	L or HIST 1111 recommended □ Course #1 met by completing required PSYC course

□ Course #2 ____



□ SPAN/EDUC

1120

Special Education Foundations Transfer Pathway (AS), continued | 60 Credits

(Select from	n two diff o and ENGL □ Course	TIES AND FINE ARTS- 2 COURSES erent departments) . 2060 recommended e #1 e #2	
GOAL 7: HIST 1111	recomme	DIVERSITY - 1 COURSE ended e	
	or GEOG 1	PERSPECTIVE - 1 COURSE L121 recommended e	
	L & PHYS	. AND CIVIC RESPONSIBILITY – 1 COU 1002 recommended e	RSE
GOAL 10: BIOL 1104	recomme	AND THE ENVIRONMENT - 1 COURSI ended e	E
Addition credits	al reco	mmended courses to meet	60
□ EDUC 22	23	Foundations of Instruction	2 cr
□ ENGT 10	_	Bridging Engineering and Education	3 cr
□ MATH 10	65	Elements of Mathematics 2	4 cr

Spanish for Educators 1

3 cr

Additional Degree Requirements - 20 credits

- □ Complete required 30 field work hours.
- Demonstrate expected standards in Professional Disposition.
- Complete additional courses to reach 60 total credits, of which 40 credits must satisfy all 10 MnTC Goals.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Special Education Foundation (AS)				
needs placement into college level for READ, WRITE (ENGC) and MATH				
gned for full-time students. to complete this program.				
oring Semester				
UC 24084cr RT 1101 (G6+8)3cr				
ST 1111(G5+7)4cr				
ATH 1055(G4)4cr				
OTAL 15cr				
ring Semester				
UC 23312cr				
UC 24094cr				
YS 1001 (G3+9)3cr NTC Goal electives3cr				
NTC Goal electives				
OTAL15cr				



Theatre Performance Transfer Pathway (AFA) | 60 Credits

As a Theatre Performance AFA candidate, students will prepare for a career as a stage artist. Students will build skills in auditioning, acting, voice, movement, directing and analysis as well as having multiple roles in fully produced productions. Upon completion of the degree, students will be prepared to either begin auditioning professionally or transfer into a BA or BFA theatre performance program for further training.

The Theatre Performance Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated Theater Performance (BA or BFA) bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Acceptance into this degree program is by audition and interview only. Students should consult their intended transfer institution for any additional admissions or general education requirements.

The Theatre Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Theatre.

	GOAL 4:	MATHEMATICAL/LOGICAL REASONING - 1 COURSE
3 cr 3 cr	GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES - 2 COURSES
1 cr	(Select fror	m two different departments) □ Course #1 □ Course #2
2 cr 3 cr 3 cr 3 cr 3 cr	GOAL 6: (Select fror	HUMANITIES AND FINE ARTS- 2 COURSES n two different departments) Course #1 met by taking required THTR course Course #2
	GOAL 7:	HUMAN DIVERSITY - 1 COURSE □ Course
	GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE □ Course
	GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
	GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course
st		- Course
	3 cr 1 cr 2 cr 3 cr 3 cr 3 cr	gral ree 3 cr GOAL 5: 3 cr (Select fror 2 cr GOAL 6: 3 cr (Select fror 3 cr GOAL 7: GOAL 8: GOAL 9:



Theatre Performance Transfer Pathway (AFA) | 60 Credits

Other Degree Requirements - 20 credits

- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.
- Earn a minimum cumulative GPA of 3.0 for THTR coursework.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Theatre Performance Transfer Pathway (AFA) needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program. Fall Semester Spring Semester ENGC 11014cr COMM 1100, 1101, 1111 THTR 11201cr THTR 11352cr or 11213cr THTR 1116 (G6).....3cr THTR 21513cr *MNTC Goal 3 with lab.....4cr THTR 11513cr MNTC Goal 73cr *MNTC Goal 53cr MNTC Goal 93cr TOTAL _____16cr Fall Semester **Spring Semester** THTR 11013cr THTR 11201cr THTR 11201cr THTR 21603cr THTR 21503cr *MNTC Goal 53cr *MNTC Goal 3......3cr *MNTC Goal 6 (non THTR)......3cr MNTC Goal 43cr MNTC Goal 103cr MNTC Goal 83cr TOTAL.... TOTAL 16cr *For MNTC Goal areas that require 2 courses, they must come from 2 different departments Some MNTC courses meet 2 different goals. With careful planning this degree can be completed in 60 credits.



Theatre Production and Design Transfer Pathway (AFA), continued | 60 Credits

As a Technical Theatre AFA candidate, students will prepare for a career as a theatre technician. Students will build skills in scenic, costume and lighting technology as well as design and rendering. Students will have opportunities to work both backstage and as technicians creating multiple fully produced productions. Upon completion of the degree, students will be prepared to either begin working professionally or transfer into a BA or BFA theatre program for further training.

The Theatre Production and Design Transfer Pathway AFA offers students a powerful option: the opportunity to complete an Associate of Fine Arts degree with course credits that directly transfer to designated Theatre Production and Design (BA or BFA) bachelor's degree programs at Minnesota State universities. * The curriculum has been specifically designed so that students completing and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

*Universities within the Minnesota State system include Bemidji State University; Metropolitan State University; Minnesota State University, Mankato; Minnesota State University Moorhead; Southwest Minnesota State University; St. Cloud State University; and Winona State University.

Acceptance into this degree program is by audition and interview only. Students should consult their intended transfer institution for any additional admissions or general education requirements.

The Theatre Department at Normandale Community College is an accredited institutional member of the National Association of Schools of Theatre.

Required Courses				GOAL 4:	MATHEMATICAL/LOGICAL REASONING -	
Incorporate the following Required Courses into the General				General		1 COURSE
Education/Minnesota Transfer Curriculum or Other Degree			Degree		□ Course	
	Requiremen	ts sections below.				
	□ THTR 1110	6 Introduction to	o Theatre	3 cr	GOAL 5:	HISTORY AND SOCIAL/BEHAVIORAL SCIENCES -
	□ THTR 112:	2 Technical The	atre Practicum	1 cr		2 COURSES
		(THTR 1122 n	nust be repeated for		(Select fro	m two different departments)
		a total of 3 cre	edits)		·	□ Course #1
	□ THTR 112	5 Drawing and F	Rendering	3 cr		□ Course #2
	□ THTR 1140	O Stagecraft		3 cr		
	□ THTR 2150	O Script Analysis	S	3 cr	GOAL 6:	HUMANITIES AND FINE ARTS- 2 COURSES
	□ THTR 2520	O Stage Manage	ement	3 cr	(Select fro	m two different departments)
						□ Course #1 met by taking required
	Complete tw	o of the following th	ree courses:			THTR course
	□ THTR 1130	O Costume Cons	struction	3 cr		□ Course #2
	□ THTR 114!	5 Lighting and S	Sound	3 cr	GOAL 7:	HUMAN DIVERSITY - 1 COURSE
	□ THTR 2020	O Basic Design		3 cr	GUAL 7:	
						□ Course
			nesota Transfer		GOAL 8:	GLOBAL PERSPECTIVE - 1 COURSE
Curriculum (MnTC) - 40 Credits				407.12.01	□ Course	
	*See MnTC	Curriculum for spec	ific course options			
					GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE
		COMMUNICATION -	· 2 COURSES			□ Course
		□ ENGC 1101				
		□ COMM 1100 or 1	.101 or 1111 or 1121	1	GOAL 10:	
	GOAL 2:	CRITICAL THINKING				□ Course
		pletion of all 40 cre				
	(Met by Com	pietion of all 40 cre	uits of the Milito)			
	GOAL 3:	NATURAL SCIENCES	S - 2 COURSES			
	(Select from	two different depar	tments; at least one	must		
	include a lab	•	,			
		 Course #1				
		□ Course #2				



Theatre Production and Design Transfer Pathway (AFA), continued | 60 Credits

Other Degree Requirements - 20 credits

- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60 credit requirement
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- $\hfill\Box$ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- □ Earn a minimum of 15 college-level credits at Normandale.
- Earn a minimum cumulative GPA of 3.0 for THTR coursework.

Coursework in this degree program satisfies the Minnesota Transfer Curriculum (MnTC).

Theatre Production and Design Transfer Pathway (AFA)		
needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
	Fall Semester	Spring Semester
1st year	ENGC 1101	THTR 1122
	Fall Semester	Spring Semester
2nd year	THTR 1122 1cr THTR 2150 3cr THTR 2520 3cr *MNTC Goal 3 with lab 4cr MNTC Goal 4 3cr MNTC Goal 8 3cr TOTAL 17cr *For MNTC Goal areas that require 2 different departments	THTR 1122



Tourism Operations and Management Certificate 17-19 Credits

Certificates in Hospitality and Tourism may be completed by students working towards an AAS in Hospitality Management. The certificates are also appropriate for students looking to gain knowledge in the hospitality and tourism industry, to either change careers or obtain leadership skills towards a promotion within the industry. At least one-third of the credits required for these certificates must be completed at Normandale.

Required Courses - 17-19 Credits □ HSMA 1103 Introduction to Hospitality and 4 cr **Tourism Management** \square HSMA 2100 Casino Management and 4 cr Operations □ HSMA 2144 Food/Beverage Management 4 cr and Cost Control □ GEOG 1102 **Human Geography** 3 cr Complete one of the following three courses: □ HSMA 2096 2-4 cr **Hospitality Management** Internship □ HSMA 2097 Senior Hospitality Internship 4 cr □ HSMA 2098 International Internship 4 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn at least one third of the required certificate credits from Normandale.



Vacuum and Thin Film Technology (AAS) 60 Credits

The Vacuum and Thin Film Technology program prepares a student to work as a technician in industries which rely on vacuum-based processes to create and manufacture products. Employment opportunities span a variety of industries such as semiconductor, microelectromechanical systems (MEMS), glass, optics, light-emitting diodes (LEDs) solar cells, vacuum-based equipment and other industries which use thin film coating processes.

Core Courses -	30 Credits	
□ ENGT 1153	AC/DC Circuits	4 cr
□ ENGT 1184	Fluid Mechanics	3 cr
□ ENGT 1290	Measurement and Process	2 cr
LINGI 1290	Control	2 (1
□ ENGT 2188	Electronics and Automation	4 cr
□ VACT 1292	Introduction to Vacuum	2 cr
□ VACI 1292	Technology	2 (1
□ VACT 2293	Vacuum Analysis and	4 cr
U VACT 2233	Troubleshooting	-1 Ci
□ VACT 2297	Thin Film Deposition	3 cr
□ VACT 2291	Tilli Tilli Deposition	3 (1
Complete eight cred	its from the following eight courses:	
□ COMT 1107	Introduction to Computer	4 cr
- COMIT TIOT	Technology	7 01
□ CSCI 1101	Introduction to Computing and	4 cr
0001 1101	Problem Solving	4 (1
□ ENGT 1180	Manufacturing Processes	2 cr
□ ENGT 1511	Introduction to Engineering	3 cr
LINGI IJII	Technology (PLTW™)	3 (1
- ENCT 1510		2 01
□ ENGT 1512	Principles of Engineering	3 cr
- FNOT 1512	(PLTW TM)	2 04
□ ENGT 1513	Digital Electronics Technology	3 cr
- FNOT 4 F 4 4	(PLTW™)	2
□ ENGT 1514	Computer Integrated	3 cr
- V/AOT 000 4	Manufacturing (PLTW)	1
□ VACT 2294	Semiconductor Processing	4 cr
Additional Reg	uired Courses - 30 Credits	
	ollege Writing	4 cr
	usiness and Technical Writing	3 cr
	ollege Physics 1	4 cr
		-1 Ci
•	following two courses:	
	troductory Chemistry	4 cr
□ CHEM 1061 Pr	rinciples of Chemistry 1	5 cr
Complete one of the	following four courses:	
	troduction to Communication	3 cr
	Indamentals of Public Speaking	3 cr
	terpersonal Communication	3 cr
	mall Group Communication	3 cr
		0 0.
	following two courses:	
	ollege Algebra	4 cr
□ MATH 1400 S	urvey of Calculus	4 cr
Complete one of the	following three courses:	
	troduction to Statistics	4 cr
	FATWAY Statistics 2	4 cr
	FATWAY Statistics: Accelerated	4 cr
/\ ±000	THE TOTAL STATE OF THE STATE OF	7 01

Complete one of the following fourteen courses to	reach 30
credits:	

creaits:		
□ ACCT 2251	Financial Accounting	4 cr
□ ART 1123	Introduction to Sculpture	3 cr
□ ART 1124	Introduction to Ceramics:	3 cr
	Handbuilding	
□ ART 1125	Glass Fusing 1	3 cr
□ COMT 1107	Introduction to Computer Technology	4 cr
□ CSCI 1101	Introduction to Computing and	4 cr
	Problem Solving	
□ ECON 2201	Principles of Microeconomics	3 cr
□ ECON 2202	Principles of Macroeconomics	3 cr
□ ENGT 1511	Introduction to Engineering	3 cr
	Technology (PLTW™)	
□ ENGT 1512	Principles of Engineering (PLTW™)	3 cr
□ ENGT 1513	Digital Electronics Technology (PLTW™)	3 cr
□ ENGT 1514	Computer Integrated Manufacturing	3 cr
	(PLTW)	
□ PHYS 1111	College Physics 2	4 cr
□ THTR 1140	Stagecraft	3 cr

Students may select COMT 1107, CSCI 1101, ENGT 1511, ENGT 1512, ENGT 1513 and ENGT 1514 if not previously used to satisfy Core Courses credit requirements.

Other Degree Requirements

- □ If needed, complete additional courses to reach 60 college-level credits total.
- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn a minimum of 15 college-level credits at Normandale.

Coursework in this degree program satisfies a portion of the Minnesota Transfer Curriculum (MnTC). Please see MnTC Degree Audit Report.

Pro	eds placement into college level for RE ogram Sequence: The sequence is will take longer for part-time stude	designed for full-time students.
	Fall Semester	Spring Semester
1st year	ENGC 1101	ENGT 1184
	Fall Semester	Spring Semester
2nd year	VACT 2293	VACT 2297



Vacuum Maintenance Technician Certificate 28-29 Credits

The Vacuum Maintenance Technician Certificate prepares individuals with little or no previous college coursework for a career as a technician supporting vacuum-based equipment. The coursework included in the certificate provides the student with the necessary academic experience in college algebra, chemistry, general engineering technology and vacuum technology to perform as a vacuum maintenance technician.

Required Courses - 28-29 Credits

□ ENGC 1101	College Writing	4 cr
□ ENGT 1153	AC/DC Circuits	4 cr
□ ENGT 1184	Fluid Mechanics	3 cr
□ VACT 1292	Introduction to Vacuum	2 cr
	Technology	
□ VACT 2293	Vacuum Analysis and	4 cr
	Troubleshooting	
□ VACT 2297	Thin Film Deposition	3 cr
Complete one of	the following two courses:	
□ CHEM 1020	Introductory Chemistry	4 cr
□ CHEM 1061	Principles of Chemistry 1	5 cr
Complete one of	the following two courses:	
□ MATH 1100	College Algebra	4 cr
□ MATH 1400	Survey of Calculus	4 cr

- □ Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- □ Earn at least one third of the required certificate credits from Normandale.



Vacuum Technology Certificate 9 Credits

The Vacuum Technology Certificate is recommended for individuals who have either a 2-year technical degree (complete with necessary background in college algebra and chemistry) or a four-year technical or non-technical degree and the desire to acquire the necessary knowledge and skills to enter the field of vacuum technology. Completion of the certificate courses prepares the two-year technical degreed student for a career as a technician in vacuum technology. Students who possess four-year degrees will be prepared to advise on and support vacuum-based processes used in industries such as semi-conductor, microelectromechanical systems (MEMS), glass and optics, LED and solar cell and thin film coatings.

Required Courses - 9 Credits

□ VACT 1292	Introduction to Vacuum	2 cr
	Technology	
□ VACT 2293	Vacuum Analysis and	4 cr
	Troubleshooting	
□ VACT 2297	Thin Film Deposition	3 cr

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- Earn at least one third of the required certificate credits from Normandale.



Women's Studies - Associate of Arts Emphasis (AA) 60 Credits

Coursework in this area is supportive of bachelor's degree programs in women's studies as well as the related fields of human services, education, American studies and other social sciences and humanities.

Required Courses Incorporate the following Required Courses into the General Education/Minnesota Transfer Curriculum or Additional Course Requirements sections below. □ WMST/ANTH Introduction to Women's Studies 3 cr SOC 1120 and Gender Studies □ WMST/ANTH Women Across Cultures 3 cr SOC 1121 Complete three of the following four courses: □ BIOL 1125 Sex and Human Diversity 3 cr □ ENGL 1140 Gender and Literature 3 cr Family: Sex/Gender/Power: □ HIST 1131 3 cr A Cross-Cultural, Historical Perspective □ SOC 1115 Sociology of Sex and Gender 3 cr General Education/Minnesota Transfer Curriculum (MnTC) - 40 Credits *See MnTC Curriculum for specific course options COMMUNICATION - 2 COURSES GOAL 1: □ ENGC 1101 □ COMM 1100 or 1101 or 1111 or 1121 CRITICAL THINKING GOAL 2: (Met by completion of all 40 credits of the MnTC) NATURAL SCIENCES - 2 COURSES (Select from two different departments; at least one must include a lab) □ Course #1 (can be met by taking BIOL 1125) □ Course #2 _ MATHEMATICAL/LOGICAL REASONING -GOAL 4: 1 COURSE □ Course _ HISTORY AND SOCIAL/BEHAVIORAL SCIENCES -GOAL 5: 2 COURSES (Select from two different departments) This goal can be met by completing the 1120 and 1121 required courses from two different departments □ Course #1 _ □ Course #2 **HUMANITIES AND FINE ARTS- 2 COURSES** GOAL 6: (Select from two different departments) □ Course #1 (can be met by taking ENGL 1140)

□ Course #2

HUMAN DIVERSITY – 1 COURSE

☐ Course met by taking required courses

GOAL 7:

GOAL 8:	GLOBAL PERSPECTIVE − 1 COURSE □ Course met by taking required courses
GOAL 9:	ETHICAL AND CIVIC RESPONSIBILITY - 1 COURSE Course
GOAL 10:	PEOPLE AND THE ENVIRONMENT - 1 COURSE □ Course

Additional Course Requirements - 20 Credits

- □ One Health (HLTH) course.
- □ One Exercise Science (EXSC) course.
- □ Elective credits additional course(s) numbered 1000 and above, if needed to complete the 60-credit requirement.

Other Degree Requirements

- Earn a minimum cumulative grade point average (GPA) of 2.0 for college-level coursework (courses numbered 1000 and above) completed at Normandale.
- ☐ Earn a minimum cumulative grade point average (GPA) of 2.0 in the MnTC.
- ☐ Earn a minimum of 15 college-level credits at Normandale.

Women's Studies Emphasis (AA)		
needs placement into college level for READ and WRITE (ENGC) Program Sequence: The sequence is designed for full-time students. It will take longer for part-time students to complete this program.		
	Fall Semester	Spring Semester
1st year	ENGC 1101	*ANTH 1121 (G5+8)
	Fall Semester	Spring Semester
2nd year	MNTC Goal 4	MNTC Goal 10 3cr EXSC elective 1cr Electives 3cr Electives 3cr Electives 1cr Electives 1cr TOTAL 14cr Courses, they must come from 2



Concurrent Registration

Sometimes a course requires that another course be completed either prior to or concurrently with it. For example, a student can complete GEOL 1110 prior to enrollment in GEOL 1111, or the student can take both GEOL 1110 and GEOL 1111 during the same semester (concurrently). The catalog description reflects when a course allows for concurrent registration.

Corequisite

Corequisites are courses in which a student must be enrolled at the same time to ensure knowledge and skills are learned concurrently. Courses are set up at the curricular level, such as MATH 0995 and MATH 1095, and must always be taken together. Only a faculty member instructing the course can waive the corequisite requirement; however, the student must still meet course prerequisites.

The registration system enforces corequisite registration when the student is both adding and dropping or withdrawing from courses.

Course Number and Class Title

Each course is designated by a department (such as ENGW, English Writing), a number, and a title. Courses numbered from 0 to 0999 are developmental and do not count toward degree requirements. Courses numbered 1000 to 2999 are college-level and apply toward certificate and associate degree program requirements.

Credits

One credit equals one hour of class time per week for the duration of the semester. Courses are offered for fixed credits and for variable credits. A fixed-credit course is one whose hours are determined by the nature of the course as approved by faculty governance. A variable-credit course means that a student will determine how many credits a class will be worth in consultation with the instructor. Variable credits are seen in independent studies, internships, cooperative education experience, and other such courses.

Course Description

The course description reflects the course's main content. It also gives information such as laboratory or clinical hours, repeat policies and other class-related requirements.

Same as

A cross listed course is one that is offered by more than one department but has the same title, course description and content. The courses are offered together as one class, with students enrolling under the department that meets their academic goals.

Example: BUSN 1152/HSMA 1162, ANTH 1101/SOC 1101

MnTC Goal

If the class satisfies one or more goal areas of the Minnesota Transfer Curriculum (MnTC), the course description will reflect it. While the credits awarded for a class will be counted only one time, the class can be applied toward all of the Goal areas as reflected in the course description. Topics courses (those numbered 1900 and 2900) cannot be used to satisfy MnTC Goal requirements.

Prerequisite

A prerequisite is a requirement that a student must complete in order to enroll in a course. Prerequisites include courses and other criteria established by faculty to ensure a student has adequate preparation to be academically successful in a course. The college catalog and eServices indicate course prerequisites. Students are responsible for understanding and adhering to prerequisite requirements for all classes. For mathematics courses, prerequisites must have been completed within 24 months before the date the course begins.



ACCT - Accounting

ACCT 1051 Accounting Basics

1 cr

This class provides preparation for future accounting work. It will help develop basic accounting knowledge in the following areas: the role of accounting in business, the accounting equation, rules of debits and credits, analyzing and recording transactions, adjusting accounts, preparing financial statements, and completing the accounting cycle.

ACCT 1052 Computerized Accounting

2 c

2-4 cr

This course is designed for non-accounting majors. The course provides an environment in which students use computerized accounting software to create financial statements and other financial reports, reinforce learned accounting concepts, and see how computer software can be used to make business decisions.

Prerequisite: ACCT 1051 or ACCT 2251.

ACCT 1900 Topics in Accounting 1-4 cr

Examination of a special topic in accounting (e.g. accounting information systems). Intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ACCT 2096 Internship in Accounting

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Accounting, consent of instructor and the Center for Experiential Education.

ACCT 2251 Financial Accounting 4 cr

This course, the first of the two consecutive courses in financial and managerial accounting, is designed to develop basic accounting knowledge of students in the following areas: generally accepted accounting principles and concepts, accounting cycle, preparation of financial statements, cash management, accounting for merchandising operations, receivables, inventory, current and long-term liabilities, long-term assets, stock transactions and financial statement analysis.

ACCT 2252 Managerial Accounting

1 cr

This course is the second of the two consecutive courses in financial and managerial accounting. The course focuses on managerial accounting concepts and accounting tools and techniques used for decision-making. The course content includes job and process costing, activity-based costing, cost volume-profit analysis, target pricing, budgets, variances and cost-revenue analysis for decision-making. Prerequisite: ACCT 2251.

ACCT 2254 Introduction to Management Information Systems 4 cr

Introduction to Management Information Systems focuses on the role of computer-based information systems in organizations and the use of information to satisfy business information needs. This course explores the use of information technology in redesigning products and procedures to make businesses more efficient and competitive. Coverage includes concepts and approaches in developing information systems, the growing role of Internet in electronic commerce, and the social and ethical impact of information systems. Emphasis is also placed on the design and use of databases.

ACCT 2853 Federal Individual Income Tax

4 ...

This course is intended to cover Internal Revenue Code as applied to individual income tax returns. The material covered would include filing requirements, personal tax credits and exemptions, gross income inclusions and exclusions, itemized deductions, employee business expenses, self-employment, rental activities, property basis, and capital gains and losses. Students will have the opportunity to prepare federal and state income tax returns using tax preparation software.

Recommended: ACCT 2251.

ACCT 2900 Topics in Accounting

1-4 cr

Examination of a special topic in accounting (e.g. accounting information systems); intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ANTH - Anthropology

ANTH 1100 Introduction to Anthropology What it Means to be Human 4 cr

This course is designed to introduce students to a full fourfield approach to the anthropological study of human beings. Students will survey the ways that humans shape and live within the cultural realms through historical, environmental, biological and cultural (social) factors. The importance of context in research will be emphasized in this course, with key concepts, sub-discipline content, approaches and questions relating to cultural, biological and linguistic anthropology, plus archaeology introduced. In addition, specific categories of key vocabulary, theoretical orientations, methods, and practices will be provided as a general introduction to what it means to be human.

MnTC Goals: 5. 8.

ANTH 1101 Cultural Diversity

3 cr

This course aims to promote understanding and appreciation of cultural diversity. Sociological and anthropological perspectives will be used to examine sociocultural diversity, the challenges and opportunities it presents, and its importance in our dynamic contemporary world. The course also emphasizes processes such as workplace diversity and long-term trends in cultural pluralism, which are transforming our everyday experiences and identities.

MnTC Goals: 5, 8.

ANTH 1102 **Tracing the Roots of Racism Through Anthropology** 3 cr

Emphasizing the role of anthropology as a primary creator and contributor historically to our understanding and use of the terms race and racism, this course focuses on how biological and cultural conceptions of race intersect both in the United States and globally. Historical and comparative approaches will be used to trace how early perspectives of race and racism evolved politically, socially, continuing to this day. One specific focus will be to demonstrate how racism perpetuates inequalities that give rise to health disparities throughout the world.

MnTC Goals: 5. 8.

ANTH 1120 Introduction to Women's and Gender Studies

This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.

Cross-Listed as: SOC 1120 and WMST 1120.

MnTC Goals: 5, 9.

ANTH 1121 **Women Across Cultures**

3 cr

This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation.

Cross-Listed as: SOC 1121 and WMST 1121.

MnTC Goals: 5, 8.

ANTH 1127 **Cultural Anthropology -The Global Human Experience**

This course examines the human way of life by recognizing and evaluating cultural adaptations to natural and social environments. The cultural organization of nonwestern and western cultures including indigenous and modern societies is analyzed with emphasis upon subsistence patterns, social structure, languages, belief systems, family and kinship, personality, culture change and applied anthropology.

MnTC Goals: 5, 8.

Introduction to Forensic Anthropology

This course examines the physical diversity of human populations - the young and old, male and female, large

3 cr

and small, and people of broadly varying ancestry. Scientific study of differences among human populations in skeletal anatomy, dentition, hair, certain soft tissue and DNA can be useful in understanding and debunking historical prejudices, understanding how natural selection operates, and to identify victims from their remains. Students will examine actual human bones and gain understanding of how physical evidence can be applied to subjects ranging from archaeology to judicial proceedings. Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 7.

ANTH 1148 Examining Culture - Seeing and Doing Anthropology

3 cr

Participation observation has

been, and continues to be, the primary method used by anthropologists in evaluating culture. Students who take this course, either as a supplement to having taken introductory cultural anthropology or as an alternative to typical cultural anthropology courses, will actively participate in either ethnographic fieldwork and/or presentations based upon individual visual essays presented, and thus, a very broad exploration of experiential learning in anthropology will be presented. MnTC Goals: 5, 8.

ANTH 1150 Native American Voices

3 cr

This course introduces North American Pre and Post-Contact History from an anthropological lens: by examining selected traditional Native American cultures from the perspectives of Native peoples with emphasis on change through time.

MnTC Goals: 5, 7.

ANTH 1188 Magic, Witchcraft and Religion: The Anthropology

This course offers a systematic comparison of the many religions in human cultures, from straightforward to complex. Students will explore not only beliefs, mythology, and rituals, but also the sacred, symbolism, organization, practitioners, and religion as it relates to other aspects of culture, such as language and politics. May include one or more field trips.

MnTC Goals: 5, 8.

ANTH 1210 Human Evolution - An Introduction to Bio-Anthropology

4 cr

This course introduces humans as biological organisms, descended from animal ancestors and closely related to other living primates. The processes involved in evolution such as natural selection, population genetics, genetic inheritance, and bio-cultural adaptation will be discussed. Human ancestry, inferred from the fossil record, will be a primary focus, especially those attributes and selection pressures that led to behaviorally modern humans. Students will be involved with hands-on activities with various fossils and artifacts for this course.

MnTC Goals: 5, 10.

Methods, Observations, and Practices in Human **Evolution: Human Evolution Lab Experience**

This one-credit laboratory experience course is built to provide hands-on and more detailed exposure to the concepts outlined in ANTH 1210 (Human Evolution - An Introduction to Bio-Anthropology) through the collection and analysis of observational data - one 50-minute lab session per week and pre-lab exercises prepared outside of class.

Primatology Observations and Applications ANTH 1212 1 cr

An optional course for students taking ANTH 1210 or for those who have previously taken ANTH 1210 or an equivalent course at another institution. This course offers an enriched, hands-on learning experience beyond ANTH 1210 in the study of non-human primates. By comparing and contrasting many varieties of primates in laboratory osteology applications, observing living primates in captive environments (zoos) and also in free range film studies (film), students will be able to assess our most closely related species and gain an appreciate for the differences and similarities seen in primates as they pertain to the study of human origins both anatomically and behaviorally.

ANTH 1230 Archaeology - Prehistory and Humanity's Cultural Origins

4 cr

This course examines how the physical remains of past cultures are used to reconstruct vanished societies, explain their origins, and understand the factors that contributed to their ultimate collapse. It focuses on the universal cultural. economic and ecological factors that affected ancient peoples and how these staged the modern world. MnTC Goals: 5, 10.

ANTH 1231 Archaeology Lab - Ancient Technologies 1 cr

This laboratory course introduces archaeology students to ancient technologies that enabled the rise of complex societies. Using hands-on activities and instructor demonstrations, students will learn how materials like stone, ceramic, and metals and innovations like projectiles, watercraft, and artificial environments led to modern complex societies.

Prerequisite: ANTH 1230 or ANTH 1126 or concurrent

ANTH 1235 Field Archeology - Methods of Exploring the Past

3 cr

This course will provide an introduction to field and laboratory archeology. The course covers the full scope of the scientific methods used to locate, excavate, analyze, and interpret the material evidence of vanished prehistoric cultures. Field archeology requires familiarity with the legal and ethical responsibilities that govern such work, and the course will discuss these in detail. Particular focus will be given to field work, including an intensive two-day excavation of a Native American site in southwestern Minnesota. The laboratory component will also include hands-on interaction with artifacts, interpreting, and cataloging materials that have been recently recovered by teams at Normandale.

MnTC Goals: 5, 9.

ANTH 1236 Archaeology of Minnesota - Prehistoric Native Cultures 3 cr

This course will evaluate the prehistory and cultures in Minnesota from the earliest prehistoric human presence to the time of contact with European settlements. Students will examine how the physical remains of past cultures in Minnesota are used to reconstruct the past. The focus will be on the environmental and resource factors that affected these early cultural groups in Minnesota.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 10.

ANTH 1899 Medical Anthropology: Health, Illness and **Healing Across Cultures**

3 cr

This course introduces students to the ways that medical anthropologists understand disease, illness, suffering, and healing as it occurs in a complex weave of biological, psychological, cultural, environmental, and political-economic processes. Particular emphasis, through case studies, will be placed upon the cultural context in which illnesses and suffering are experienced, narrated, and addressed. The importance of cultural competence in health-related practices (the ability to understand and communicate effectively with people from different cultures) will be emphasized throughout this course. Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 8.

ANTH 1900 Topics in Anthropology

Examination of a special topic in anthropology. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ANTH 2096 Internship in Anthropology

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Anthropology and consent of instructor and the Center for Experiential Education.

ART - Art

ART 1101 The Visual Arts

Introduction to the concepts underlying the creation and appreciation of the visual arts. Examination of works of Western and non-Western art: the visual elements and principles of design, art mediums, expression, and style. In addition to lecture, weekly studio sessions allow for the exploration of the creative process in works of art using a variety of materials. Lecture 2 hours per week; studio 2 hours per week.

MnTC Goals: 6, 8.

ART 1102 Foundation Art History

Examines major Western art movements from Paleolithic cave painting through the Renaissance and Reformation in Northern Europe. Explores architecture, sculpture, painting, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

ART 1103 Foundation Art History

3 cr

Examines major Western art movements from the Baroque through Expressionism and other movements of the 1940s. Explores architecture, photography, sculpture, painting, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

ART 1104 Contemporary Art Survey

3 cr

Examines art movements from Abstract Expressionism through Postmodern and Contemporary styles, encompassing 1945 to the present day. Explores architecture, painting, photography, video art, sculpture, and craft through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

3 cr

2-4 cr

3 cr

3 cr

ART 1105 Non-Western Art Survey

3 cr

Examines art from the cultures of Asia, Africa, and the Americas. Explores architecture, painting, sculpture, craft, textile, and body adornment through lecture, discussion, and written assignments.

MnTC Goals: 6, 8.

ART 1109 Exploring Photography

3 cr

An overview of photography, combining principles and processes of traditional film with contemporary digital technology. A variety of visual projects solving creative and technical problems incorporating analysis, interpretation, and expression. Development of critique and related vocabulary. Lecture 2 hours per week; studio 2 hours per week.

MnTC Goals: 6.

ART 1110 Introduction to Film Photography

3 cr

Introduction to the technical and conceptual practices of photography as a creative medium. Camera operation and technique, photographic composition and design, processing and printing in a traditional darkroom. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6.

ART 1113 Video Art

3 cr

Introduction to the technical and conceptual practices of video as a creative medium. Concentration on conceptualization, interpretation, and evaluation of video-based art through screenings, discussions, critiques, demonstrations, and assigned projects. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1114 Introduction to Digital Photography

Introduction to the technical and conceptual practices of photography and digital technology as a creative medium. Camera operation and techniques, composition and design, digital image capture, related software, and digital output using the computer as a digital darkroom for creating photographic images. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1115 2D Animation and Interactivity

3 cr

3 cr

Introduction to the technical and conceptual practice of two-dimensional animation and interactivity as a creative medium. Computer software applications are used to create animations and interactive content. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1116 Introduction to Graphic Design

3 cr

3 cr

This course presents an introduction to graphic design as a form of visual expression. Emphasis will be placed on layout, design elements, typography and output. Relevant software, critique, and related vocabulary are also incorporated. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1118 Foundation Two-Dimensional Design

Introduction to making art in two-dimensions. Composition and the arrangement of color, line, shape, texture, value, and space using the principles of design. Assignments use a variety of tools, techniques, and materials. Development of critique and related vocabulary. Lecture 1 hour per week; lab 4 hours per week.

MnTC Goals: 6.

ART 1120 Foundation Three-Dimensional Design

3 cr

Introduction to making art in three-dimensions. Theory and application using the elements and principles of design. Assignments use a variety of tools, techniques, and materials. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6.

ART 1121 Foundation Drawing 1

3 cr

Introduction to concepts, materials, and methods of drawing. Emphasis on visual elements and principles of design using various drawing media. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1122 Foundation Digital Imaging

3 cr

Introduction to the technical and conceptual practices of computer-generated art. Raster and vector computer software programs are used for digital output of projects. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1123 Introduction to Sculpture

3 cr

Introduction to the basic language and spatial concepts of sculpture to develop an understanding of additive, subtractive, and assemblage techniques. Create three-dimensional sculptures using a variety of materials to solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1124 Introduction to Ceramics: Handbuilding

Introduction to concepts, materials, and methods of ceramics. Handbuilding techniques used to create various artworks that solve technical and creative problems.

Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1125 Glass Fusing 1

3 cr

3 cr

Introduction to concepts, materials, and methods of fused glass. Glass fusing techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6.

ART 1126 Introduction to Printmaking: Screenprint

3 cr

Introduction to concepts, materials, and methods of printmaking. Screen print and print techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6.

ART 1127 Introduction to Painting

3 cr

Introduction to concepts, materials, and methods of painting. Explore paint to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

Recommended: ART 1118 or ART 1121.

MnTC Goals: 6.

ART 1128 Watercolor Painting

3 cr

Introduction to the concepts, materials and methods of watercolor painting. Explore watercolor to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6.

ART 1129 Introduction to Printmaking: Relief

3 cr

Introduction to concepts, materials, and methods of printmaking. Relief print techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6.

ART 1130 Introduction to Ceramics: Wheel Throwing 3 cr

Introduction to concepts, materials, and methods of ceramics. Wheel throwing techniques used to create various artworks that solve technical and creative problems. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week. MnTC Goals: 6

ART 1132 Mixed Media

3 cr

Introduction to concepts, materials, and methods of mixed media. Experimentation with a variety of media. Projects may include photographic screen printing, felting, batik, papermaking, and/or bookbinding. Development of critique and related vocabulary. Lecture 1 hour per week; studio 4 hours per week.

MnTC Goals: 6

ART 1900 Topics in Art

1-4 cr

An examination of a special topic in art; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ART 2096 Internship in Art

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience in occupations that require artistic sensitivity and judgment. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Art and consent of instructor and the Center for Experiential Education.

ART 2200 AFA in Art Capstone: Portfolio and Professional Practices 3 cr

Introduction to presentation, documentation, business skills, and career planning specific to studio art. Practical applications to assist in transfer and career building. AFA in Art Capstone: Portfolio and Professional Practices, along with the AFA in Art Capstone: Exhibition course, are culminating activities for the AFA in Art degree. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1118 and ART 1121 and ART 1122.

ART 2201 Figure Drawing

3 cr

Explore, refine, and expand on concepts and skills learned in Drawing I. Introduction to drawing both nude and clothed models with an emphasis on human proportion, human anatomy, and composition. Work with various drawing techniques and materials. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1121.

MnTC Goals: 6.

ART 2203 Advanced Ceramics: Handbuilding

3 cr

Continued and advanced exploration of various handbuilding, surface decoration, and kiln firing techniques. Emphasis on developing content and personal direction through discussion, critique, and contemporary ceramic context. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1124.

MnTC Goals: 6

ART 2204 Foundation Drawing 2

3 cr

Explore, refine, and expand on concepts and skills learned in Drawing I. Emphasis on experimentation, the expressive potential of the medium use of color, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1121.

MnTC Goals: 6

ART 2206 Glass Fusing 2

3 cr

Explore, refine, and expand on concepts and skills learned in Glass Fusing 1. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1125.

MnTC Goals: 6.

ART 2207 Advanced Photography

Explore, refine, and expand on concepts and skills learned in Black and White Photography or Digital Photography. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1110 or ART 1114.

MnTC Goals: 6.

ART 2208 Advanced Painting 3 cr

Explore, refine, and expand on concepts and skills learned in Painting or Watercolor Painting. Emphasis on experimentation, the expressive potential of the medium, and developing a personal vision that utilizes both formal and conceptual concerns. Lecture 1 hour per week; studio 4 hours per week.

Prerequisite: ART 1127 or ART 1128.

MnTC Goals: 6.

ART 2210 AFA in Art Capstone: Exhibition

1 cr

Plan, design, and install an art exhibition with fellow degree students, in a gallery setting. Exhibiting a body of artwork is a culminating activity for the AFA in Art degree. Studio 2 hours per week.

Prerequisite: Applied and accepted into AFA in Art degree program and ART 2200 (C or higher) and ten or fewer art credits remain for program completion.

ART 2900 Topics in Art

1-4 cr

An examination of a special topic in art; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

BIOL - Biology

BIOL 1001 Biology Boot Camp

2 c

A non-majors course designed for the student with little or no background in biology, or as a refresher for the student who has not taken a biology course in the last three years. Provides a basic foundation for further course work in the biological sciences. Lecture 2 hours per week.

BIOL 1100 Survey of Biology

4 c

A non-majors, general education lab course that explores the organization of life. Topics include the scientific method, cells, metabolism, molecular biology, genetic change, species diversity, and ecology and evolution. Lecture 3 hours per week. Lab requires a minimum of 3 hours per week of scheduled and/or self-directed lab work. Prerequisite: Eligible for READ 1106.

MnTC Goals: 3.

BIOL 1101 Introduction to Human Genetics

4 cr

A non-majors, general education lab course that explores the basic principles of human genetics. Topics include scientific method, Mendelian genetics, sex determination, karyotyping, molecular genetics, genetic counseling, the Human Genome Project, genetics of immunity and cancer, and population genetics. Lecture 3 hours per week. Lab requires a minimum of 3 hours per week of self-directed lab work.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 3.

BIOL 1102 Human Biology

4 cr

A non-majors, general education lab course that introduces the topics of human structure, function, and causes of disease. Topics include the scientific method, cells and organ systems with an emphasis on contemporary issues. Lab requires dissection of a small mammal and collaborative data collection. Lecture 3 hours per week. Lab requires a minimum of 3 hours per week of self-directed lab work.

Prerequisite: Eligible for READ 1106. May not be taken for credit after earning a C or higher in BIOL 2041.

MnTC Goals: 3.

BIOL 1103 Introduction to Emerging Diseases 4 c

A non-majors general education lab course that introduces the global, national, and local factors that cause and influence the emergence and re-emergence of infectious disease. Topics include the scientific method, epidemiology, disease transmission, survey of microorganisms, bioterrorism, food and water safety, and sexually transmitted diseases. Lab exercises mandate following biosafety practices for handling microbial pathogens. Lecture 3 hours per week. Lab requires a minimum of 3 hours per week of scheduled and self-directed lab work.

Prerequisite: Eligible for READ 1106. May not be taken for credit after earning a C or higher in BIOL 2204 or 2043.

MnTC Goals: 3, 8.

BIOL 1104 Minnesota Natural History and Field Biology 4 of

A general education lab course that explores the diversity of life in Minnesota from a natural history perspective. Topics include the scientific method, ecology of terrestrial and aquatic biomes, evolution of plants and animals, consequences of historic and contemporary environmental change, and the future of Minnesota's biodiversity. This course is intended for students who are not majoring in biology. Lab requires field trips on and off campus which might include required field trips on prescribed dates. Lecture 3 hours per week. Lab requires a minimum of 3 hours per week of scheduled and/or self-directed lab work including field trips.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 3, 10.

BIOL 1110 Environmental Biology 3 cr

A general education biology course without lab that explores the principles of environmental biology and the ways in which humans depend on and influence the natural world. Topics included the scientific method, basic ecological principles, population growth, natural resources, energy, conservation, pollution and their relationships to Minnesota and global environmental concerns. This course is intended for students who are not majoring in biology. Lecture 3 hours per week.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 3, 10.

BIOL 1120 Introduction to Evolutionary Biology 3 cr

A non-majors, general education course that explores the process of biological evolution and the fundamental mechanisms and concepts by which evolution works. Topics typically covered include the nature of science, the scientific history of evolution, evidence and processes of evolution, natural selection and adaptation, role of DNA variation and gene regulation in evolution, origin of life, macroevolution and the tree of life. Lecture 3 hours per week.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 3.

BIOL 1125 Sex and Human Diversity 3 cr

A general education course without a lab for biology non-majors. An introduction to the science of biology focused on the fundamental concepts underlying human sexuality, reproduction and development from an evolutionary perspective. Topics include the evolution of sex, sex determination, anatomy and physiology of the human reproductive systems, development, infertility, contraception, reproductive health disparities, and sexually transmitted diseases. Lecture 3 hours.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 3, 7.

BIOL 1501 Principles of Biology 1

5 cr

This course is designed for students majoring in biology and other science related fields, including the health professions. Students will explore major biological processes occurring at the cellular level, with emphasis on cell structure and function, metabolism, reproduction, development, genetics and gene expression, and evolution. Students will engage in techniques appropriate to the study of biological processes and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree and is a prerequisite for BIOL 1502. It is strongly recommended that students have successfully completed (C or higher) a college level biology lab course or a high school biology course within the past three years. before enrolling in this course. Lecture 4 hours per week; lab 3 hours per week.

Prerequisite: Eligible for MATH 1100 and eligible for READ 1106.

MnTC Goals: 3.

BIOL 1502 Principles of Biology 2

4 cr

This course is the second in a sequence designed for students majoring in biology and other science related fields, including the health professions. Students will explore the evolution and diversity of organisms and their interactions with each other and the environment. Students will engage in techniques appropriate to the study of diverse organisms and their interactions and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree and is the prerequisite for BIOL 2202, 2203, 2205, 2206, 2207, and 2208. Lecture 3 hours per week; lab 3 hours per week. Prerequisite: BIOL 1501 (C or higher).

MnTC Goals: 3.

BIOL 1900 Topics in Biology

1-4 cr

An examination of a special topic in biology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

BIOL 2041 Human Anatomy

4 cr

A rigorous and demanding study of the human body, intended for students pursuing careers in the health professions. Emphasis includes both gross and microscopic anatomy. Laboratory includes small mammal dissection, basic histology, and the gross and microscopic study of the human organ systems. Small mammal dissection is required for course completion. Lecture 3 hours. Lab requires a minimum of 3 hours per week of self-directed lab work.

Prerequisite: CHEM 1050 or CHEM 1061 (C or higher) or concurrent registration and eligible for READ 1106.

BIOL 2042 Human Physiology

Examination of the principles of human biological function with emphasis on homeostatic mechanisms of the body. Lecture and laboratory experiences include EMG, ECG, pulmonary function, hormone studies, exercise studies, and independent investigations. Lecture 3 hours. Lab requires a minimum of 3 hours per week of scheduled and/or self-directed lab work.

Prerequisite: BIOL 2041 (C or higher), CHEM 1050 or CHEM 1061 (C or higher), and eligible for READ 1106. MnTC Goals: 3.

BIOL 2043 Microbiology

A rigorous lab course intended for students pursuing careers in the health professions that examines the biology of bacteria, protozoa, fungi, helminths, viruses, and prions. Topics include prokaryotic and eukaryotic cell structure and function, microbial metabolism, microbial genetics, physical and chemical methods of control, host defenses, and applications in health care. Lab exercises mandate following biosafety level 2 practices for handling microbial pathogens. Lecture 3 hours. Lab requires a minimum of 3 hours per week of scheduled and self-directed laboratory

Prerequisite: One college biology lab course (C or higher), one college chemistry laboratory course (C or higher), ENGC 1101.

MnTC Goals: 3.

BIOL 2096 Internship in Biology

This internship course explores careers and training in a supervised work setting. Combines theory with field experience to explore careers and business concepts. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline. Prerequisite: Previous coursework in Biology and consent of instructor and the Center for Experiential Education.

BIOL 2202 Animal Diversity

A laboratory science course intended for biology and related majors. Students will explore evolutionary relationships among animal taxa from morphological, physiological, developmental, and ecological perspectives. Dissection of preserved animals is a required part of the laboratory. Lecture 3 hours per week; lab 3 hours per week.

Prerequisite: BIOL 1106 or BIOL 1502 (C or higher). MnTC Goals: 3.

BIOL 2203 Botany

A majors lab course that introduces the biology of plants and plant-like organisms. Course takes an evolutionary perspective emphasizing morphology, anatomy, adaptations, physiology, reproduction, ecology and economic importance of plants. Lecture 3 hours. Lab requires a minimum of 3 hours per week of scheduled or self-directed lab work.

Prerequisite: BIOL 1501 (C or higher).

MnTC Goals: 3.

4 cr

4 cr

2-4 cr

4 cr

4 cr

BIOL 2205 Genetics

4 cr

This course is designed for students majoring in biology. Students will explore major concepts in Mendelian, molecular, and population genetics, with emphasis on prokaryotic and eukaryotic gene expression, recombination, gene mapping, and chromosome analysis. Students will engage in techniques appropriate to genetic analysis and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree. Lecture 3 hours per week; Lab 3 hours per week.

Prerequisite: BIOL 1502 (C or higher).

MnTC Goals: 3.

BIOL 2206 Ecology

4 cr

This course is designed for students majoring in biology. Students will explore ecological concepts and the scientific research that has built out understanding of interactions in nature at the organismal, population, community, ecosystem, and global levels. Students will acquire an understanding of how the different levels of ecology are studied, how these levels relate to each other, and what properties are important at increasing levels of complexity. Additional topics include evolutionary ecology and contemporary environmental change and its consequences. Students will engage in techniques appropriate to ecological study and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree. Lab requires field trips on and off campus which might include field trips on prescribed dates. Lecture 3 hours per week; lab 3 hours per week.

Prerequisite: BIOL 1502 (C or higher).

MnTC Goals: 3, 10.

BIOL 2207 Cell Biology

This course is designed for students majoring in biology. Students will explore major concepts in cell biology including eukaryotic cell structure and function, the cellular use of biomolecules, membranes, signal transduction, motility, and the extracellular matrix. Students will engage in techniques appropriate to the study of cells and cellular processes and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree. It is strongly recommended that students have successfully completed (C or higher) BIOL 2205 before enrolling in this course. Lecture 3 hours per week; lab 3 hours per week. Prerequisite: BIOL 1502 (C or higher).

MnTC Goals: 3.

BIOL 2208 Biology of Microorganisms

This course is designed for students majoring in biology. Students will explore major concepts in microbiology including taxonomy, structure and function, biochemistry, metabolism, pathogenesis, immunology, and ecology of microbes, emphasizing the diverse role of microbes in the biological world. Students will engage in techniques appropriate to the study of microorganisms and gain experience in experimental design, data analysis and interpretation, and the communication of results. This course meets a requirement for the Biology (Minnesota State Transfer Pathway) AS-P degree. It is strongly recommended that students have successfully completed (C or higher) BIOL 2205 before enrolling in this course. Lecture 3 hours per week; lab 3 hours per week.

Prerequisite: BIOL 1502 (C or higher).

MnTC Goals: 3.

BIOL 2900 Topics in Biology

1-4 cr

4 cr

An examination of a special topic in biology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

BUSN - Business

BUSN 1102 Social Media Marketing

3 cr

In this course, students examine how organizations use social media to listen, understand and engage their target markets, provide value to their customers and potential customers, and promote calls to action that lead to sales of products and services. Topics include blogs, microblogs, social networks, video sharing, photo and image sharing, podcasting, various social media platforms, and careers in social media marketing.

BUSN 1105 Introduction to Business

The world of business, its relationship to the modern American economy, management, marketing, and financial disciplines. A broad overview of business functions and organizations.

BUSN 1107 Leadership in the Workplace

3 cr

This course provides a basic introduction to leadership in the workplace. Students will assess their leadership traits and develop skills to improve their own leadership performance.

BUSN 1125 Entrepreneurship

3 cr

3 cr

Examines the skills needed to be a successful entrepreneur; screens a business opportunity and assesses the resources needed for successful setup of a company.

BUSN 1130 Introduction to International Business

International dimensions of business: global business environment (economic, legal, cultural, and political), and international business functions (management, marketing, finance, exporting, and importing).

BUSN 1145 Supervision

3 cr

This course is designed for those students who are interested in becoming supervisors, or have recently become supervisors at their current jobs. Students will learn, develop, and improve the core competencies that will assist them in becoming a good supervisor. Recommended: Eligible for READ 1106, ENGC 0900 and MATH 0500.

BUSN 1152 Hotel/Lodging Management

4 cr

This course examines the theoretical applications of room division operations including yield management and other vital hotel information concepts, with an emphasis on the bottom line.

Cross-Listed as: HSMA 1162.

BUSN 1153 Principles of Food Production and Sanitation 4 of

Students are given hands on laboratory experiences in all major areas of food production. Lectures allow students to bridge the gap of food production with operating profitable food service and restaurant entities.

Cross-Listed as: HSMA 1143.

BUSN 1154 Food/Beverage Management and Cost Control 4 cr

A working understanding and application of the principles of food, beverage, labor, cost control, and management functions

Cross-Listed as: HSMA 2144.

BUSN 1156 Casino Management and Operations

Develop a working understanding of the principles of casino management and operational procedures necessary for state, federal, and Native American compliance (regulations and legal issues).

Cross-Listed as: HSMA 2100.

BUSN 1157 Introduction to Hospitality and Tourism 4 cr Management

This introductory course provides a portal to the dynamic field of hospitality, travel, and tourism industry. It provides students with a comprehensive overview of hospitality and tourism management including hotels, restaurants, food service, marketing, service companies, as well as the functional areas of hotel operations.

Cross-Listed as: HSMA 1103.

BUSN 1158 Convention and Meeting Planning Management

4 cr

An overview of successful convention and meeting planning management including all services, execution, and follow-up.

Cross-Listed as: HSMA 2173.

BUSN 1159 Hospitality Sales and Marketing Management 4 cr Organization and functioning of marketing and sales department, the need for sales planning through analysis

of product, competitors and market. In addition to sales planning and analysis, students will work with industry experts selling the hospitality product.

Recommended: Strong interest in hotel management along with computer skills.

Cross-Listed as: HSMA 2172.

BUSN 1170 Introduction to Club Management

Introduction to Club Management provides a unique perspective on all types of club management including spa, fitness, athletic, and city. Unique discussion and case study provide the student with the keys to successful leadership development complemented with relationship marketing skills and manufacturing successful club managers. Cross-Listed as: HSMA 1170.

BUSN 1201 Information Technology Concepts and Business Software 1

3 cr

4 cr

The purpose of the course is to prepare students for their future academic and professional pursuits using computers. The outcomes are designed to give students the tools to exceed the minimum expectations of employers. The course includes computer concepts and computer application software. Students will learn computer concepts of how computers operate, how they are used in industry, and how they improve communications as well as computer hardware, software and development, personal productivity software, data communications, the World Wide Web and e-mail, the social challenge, and career options. Students will also learn computer application software using document production in word processing, spreadsheets, and database management. Students will create text-based documents to include letters, research reports in MLA and APA formatting with citations, one-page brochure with clip art, page and section breaks, reviewing/tracking features, and creating a resume as a web page, use the formula features, charting, functions, pivot tables and goal seeking for spreadsheets; and use the database features to create tables and reports. Import data from Excel, set validation rules, and establish referential integrity of data including sorting and querying to gain skills to use in other courses or in the workplace. This course is required for most general computer requirements at 4-year colleges. Prerequisite: Eligible for READ 0960 and ENGC 0900 or higher. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: CIM 1201.

BUSN 1210 Exceptional Customer Service

3 cr

Examines exceptional customer service issues that are key to building a successful customer driven organization.

Business Problem Solving Analyzing - Excel 3 cr Emphasizes worksheet formatting, formula design, advanced functions, macro commands (Visual Basic for Applications), graphing, PivotTables, and data analysis. Students will learn features using business scenarios. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Excel Certified Application

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for ENGC 1101 and READ 1106. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for

Cross-Listed as: CIM 1220.

Specialist Exam.

An introduction to project management using MS Project. Includes topics such as project management terminology, navigation in MS Project, creating and editing a project schedule, working with charts, resources and filters, tracking progress and costs, and closing a project. Provides a foundation for globally recognized Project Management Institute credentials such as CAPM and PMP.

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for ENGC 1101 and READ 1106.

Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

Cross-Listed as: CIM 1250.

BUSN 1900 Topics in Business

1-4 cr

An examination of a special topic in business; intended for all interested students. Topics may include public administration, supervision, and others. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

BUSN 2096 Internship in Business 2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience in an approved business environment. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Business and consent of instructor and the Center for Experiential Education.

BUSN 2100 Human Relations and Effective Teams

3 cr

Focuses on the importance of personal and group interrelationships within an organization. Topics covered are behavioral types, the communication process, diversity, equal opportunity, workplace bias, group leadership, and the psychological aspects of group dynamics.

BUSN 2125 Business Practices in the Global Market

Provides understanding and application into the complex global business arena. Global markets have created the need for companies to do business in every corner of the world. It is imperative that businesses conduct themselves in a professional, ethical, yet sensitive manner regarding regional customs, traditions, and religious practices. This course examines the need for professional business practices, ethics, protocol, etiquette, and professional and social behavior in all settings of business, national and international.

Prerequisite: At least one course in BUSN or HSMA. Cross-Listed as: HSMA 2125.

BUSN 2150 Revenue Management in Hospitality and Tourism

4 cr

This course provides a foundation for managing revenues and costs in the hospitality and tourism industry. Students will learn the historical development of yield management (YM) and its formation into modern day revenue management (RM). The course will rely upon cases and articles to analyze trends and develop effective revenue management strategies in the accommodations, food and beverage, attractions and transportation sectors of the hospitality and tourism industry.

BUSN 2155 Legal Environment of Business

3 cr

A survey course about the legal aspects of managing a business. It includes a review of the basic U.S. legal system, ethics, contracts, legal structure of business, employment, consumer issues and international business law.

BUSN 2200 Human Resource Management

3 cr

An overview of the principles and practices of administering the human resource management functions in modern organizations to achieve an organization's objectives. Topics include employee selection and retention, training, job evaluation, compensation, health and safety, labormanagement relations, communication with diverse workforces, employment law, and outsourcing.

BUSN 2220 Statistics for Business and Economics

4 cr

Basic statistics of business, economics, and public administration. Descriptive statistics, probability, and statistical inference. Understanding statistical methods as tools of decision-making.

Prerequisite: Eligible for MATH 1100.

BUSN 2252 Professional Selling

3 cr

Analyze successful sales practices. Develop need satisfaction selling skills through skill practice that may apply to both selling and non-selling.

BUSN 2300 Principles of Management

3 cr

Develop insights into successful planning, organizing, directing, staffing, and controlling an organization and its employees.

BUSN 2310 Small Business Management

3 cr

All phases of setting up a small business: management, marketing, and financial operations. The final project is the development of a business plan.

BUSN 2400 Principles of Marketing

3 cr

The total marketing process from a strategic view, emphasizing managerial implications for product, promotion, price, and distribution strategies.

BUSN 2500 Principles of Property and Liability Insurance

This course presents the basic principles of insurance, introducing insurance regulation, financial performance, marketing techniques, underwriting, claims, risk management, loss exposures and insurance policies.

Prerequisite: BUSN 1105

BUSN 2501 Introduction to Property and Casualty Insurance 3 cr

This course presents an overview of insurance, the major insurer functional areas, insurance regulation, insurance policies, and personal and commercial insurance with the goal of providing the learner with foundational knowledge and a familiarity with property-casualty insurance

Prerequisite: BUSN 1105

BUSN 2502 Personal Insurance

3 cr

This course presents an overview of personal loss exposures and an in-depth description of property-casualty personal insurance policies, including personal auto, homeowners, and others. Additionally, this course describes the loss exposures and planning needed to deal with premature death, retirement, disability, and illness. Prerequisite: BUSN 1105

BUSN 2503 **Commercial Insurance**

3 cr

This course provides an in-depth examination of propertyliability commercial insurance policies, including commercial property, business income, commercial crime, equipment breakdown, inland and ocean marine, general liability, commercial auto, workers compensation and employers' liability, business owners, farm, and specialty coverages.

Prerequisite: BUSN 1105

BUSN 2900 Topics in Business

1-4 cr

An examination of a special topic in business; intended for all interested students. Topics may include public administration, supervision, and others. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

CCD-Counseling-Career-**Development**

CCD 1170 **Career Exploration**

1 cr

Relate self-understanding of interests, values, personality and skills to career options through exercises and inventories as you explore career fields. Prerequisite: Eligible for ENGC 0900 or higher and READ 0960 or higher or consent of instructor.

CCD 2000

Giobal Career Development Facilitator Program (GCDF)

8 cr

A certificate training program for career development facilitators. The course consists of the education of career development facilitators in the following areas: career development overview, theory and information, helping and assessment skills, career information, resources and program design, reality checks, goal setting and action goals.

Prerequisite: Prior experience and instructor's permission. Recommended: Eligible for READ 0960 and ENGC 0900.

CHEM - Chemistry

CHEM 1000 Real World Chemistry

3 cr

This course, designed for non-science majors, is an introduction to basic chemical concepts and principles with an emphasis on a conceptual understanding of chemistry. Topics will focus on various applications of chemistry in the world today. This course is suitable for students who may not have a strong math or science background. MnTC Goals: 3.

CHEM 1001 Real World Chemistry and Lab

4 cr

This lab course, designed for non-science majors, is an introduction to basic chemical concepts and principles with an emphasis on a conceptual understanding of chemistry. Topics will focus on various applications of chemistry in the world today. This course is suitable for students who may not have a strong math or science background. Lecture 3 hours per week; lab 2 hours per week.

MnTC Goals: 3.

CHEM 1010 Environmental Chemistry

4 cr

Chemical concepts are covered and applied to understanding and analyzing current environmental issues. Topics include air and water pollution, nuclear power, energy usage, and recycling. Lecture 3 hours; lab 2 hours. MnTC Goals: 3, 10.

CHEM 1020 Introductory Chemistry

4 cr

3 cr

Basic principles of chemistry discussed and applied to everyday situations. Tools and methods of investigation used by chemists are introduced through weekly laboratory sessions. Lecture 3 hours; lab 2 hours.

MnTC Goals: 3.

CHEM 1050 **Foundations of Organic and Biochemistry**

This one-term laboratory course, designed for non-majors, builds on general chemistry concepts to provide an overview of organic and biochemistry with an emphasis on applications to the chemistry of the human body. Topics include solutions and body fluids, acid-base chemistry, relation between structure and reactivity for biochemical molecules, metabolic pathways, and applications of nuclear chemistry. Lecture 2 hours; lab 2 hours.

Prerequisite: CHEM 1020 or high school chemistry within

the past 2 academic years.

MnTC Goals: 3.

CHEM 1061 Principles of Chemistry 1

Basic concepts of chemistry: atomic theory, stoichiometry, thermochemistry, chemical bonding, molecular structure, properties and behavior of the physical states, reaction types. Lecture 4 hours; lab 3 hours.

Prerequisite: CHEM 1020 (C or higher) or high school chemistry with lab within the past 2 academic years and MATH 0700 proficiency or concurrent registration or high school equivalent.

MnTC Goals: 3.

CHEM 1062 Principles of Chemistry 2

5 cr

5 cr

Continuation of Chemistry 1061: Physical properties of solutions, chemical equilibrium, kinetics, reaction mechanisms, acid-base chemistry, thermodynamics, electrochemistry, qualitative analysis, nuclear chemistry, and chemistry in the atmosphere. Lecture 4 hours; lab 3 hours.

Prerequisite: CHEM 1061 (C or higher).

MnTC Goals: 3.

CHEM 1900 Topics in Chemistry

1-4 c

An examination of a special topic in chemistry; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

CHEM 2041 Quantitative Analysis

4 cr

Lecture and laboratory course emphasizing the theory and practice of gravimetric, volumetric, and instrumental analysis. Lecture 3 hours; lab 3 hours.

Prerequisite: CHEM 1062. Offered: Fall.

CHEM 2061 Organic Chemistry 1

5 cr

Mechanisms and reactions of aliphatic compounds, stereochemistry, spectral analysis, and relevant instrumentation. Lecture 4 hours; lab 4 hours.

Prerequisite: CHEM 1062.

MnTC Goals: 3.

CHEM 2062 Organic Chemistry 2

0 0.

5 cr

Aromaticity and reactions of aromatic compounds, heterocyclic compounds, polynuclear aromatic compounds, carbonyl polyfunctional compounds (aldehydes, ketones, carboxylic acids, carboxylic acid derivatives), enol and enolate chemistry, carbohydrates, synthetic polymers, amino acids, and proteins. Lecture 4 hours; lab 4 hours. Prerequisite: CHEM 2061 or CHEM 2058 with instructor's permission.

MnTC Goals: 3.

William Godier Cr

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Chemistry and consent of instructor and the Center for Experiential Education.

CHEM 2900 Topics in Chemistry

CHEM 2096 Internship in Chemistry

1-4 cr

An examination of a special topic in chemistry; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

CHEM 2921 Biochemistry

3 cr

This is a one semester non-biochemistry major course designed for students who intend to complete a four-year biological sciences major or enter a pre-professional program in dentistry, medicine, veterinary medicine, or pharmacology. Introduction to the fundamentals of biochemistry: structure and function of biological macromolecules; including the study of enzyme catalysis, metabolism and the regulation of metabolism (carbohydrates, lipids, amino acids and nucleotides), comprehensive, quantitative analysis of chemical equilibria, bioenergetics, and the chemical foundation of genetic information. Lecture 3 hours.

Prerequisite: CHEM 2061 and BIOL 1501.

CHIN - Chinese

CHIN 1100 Beginning Chinese 1

5 cr

2 cr

Introduction to basic language skills. Development of listening, reading, speaking, and writing skills. Cultural understanding and sensitivity are important aspects of the course.

MnTC Goals: 8.

CHIN 1101 Introduction to Interpreting and Translation

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: Same as INDS 1101, FREN 1101, GERM 1101, JAPN 1101, SPAN 1101.

CHIN 1111 Chinese Culture & Civilization

This course acquaints students with aspects of the culture and civilization of the Chinese-speaking peoples. Course topics will be selected from among the areas of the arts, literature and history to allow students to gain an awareness of cultural, social, religious and linguistic aspects of the target culture. Students will develop an understanding of the responsibility that world citizens share for their common global future by comparing and contrasting their own culture with that of Chinese-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

CHIN 1200 Beginning Chinese 2

This course is a continuation of the listening, speaking, reading, and writing competencies developed in CHIN 1100. Students further explore cultural differences, helping them to develop a deeper understanding of the world and a greater cultural perspective

Recommended: CHIN 1100.

MnTC Goals: 8.

CHIN 2096 Internship in Chinese

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Prerequisites: Previous coursework in Chinese and consent of instructor and the Center for Experiential Education.

CHIN 2100 Intermediate Chinese 1 5 cr

Students continue the development and strengthening of the four communication skills (listening, speaking, reading, and writing). Cultural and literary materials will develop an appreciate for the arts, history, culture, and the literature of Chinese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes resultative and potential complements, progressive change, and the aspect particle.

Recommended: CHIN 1200.

MnTC Goals: 6, 8.

CHIN 2200 Intermediate Chinese 2

5 cr

Students continue the development and strengthening of the four communication skills (listening, speaking, reading, and writing). Cultural and literary materials will develop an appreciate for the arts, history, culture, and the literature of Chinese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the passive structure, compound sentences, causative and pivotal constructions, and tone/mood.

Recommended: CHIN 2100.

MnTC Goals: 6, 8.

3 cr

5 cr

2-4 cr

CHWN - Community Health Worker-Navigator

CHWN 1000 The Community Health Worker: Role, Advocacy, Outreach, and Resources 3 cr

The course defines the role of the Community Health Worker (CHW). Students will explain strategies for personal safety in relation to home visits. Students will gain an understanding of the value of self-care and personal wellness. Students will become familiar with the health-related needs of their communities and cultural considerations. Students will also learn about their role as a liaison and connecting clients to appropriate community resources.

CHWN 1100 Cultural Health Communication, Teaching, and Capacity Building 3 cr

This course will introduce concepts of verbal and non-verbal communication required for the Community Health Worker (CHW) to effectively interact with clients, their families, and healthcare providers of all backgrounds. Students apply skills such as active listening and motivational interviewing. This course also focuses on the CHW's role as a teacher to increase the capacity of the community and the client to access the health care and social services systems. Course materials will emphasize empowering clients to become self-sufficient in achieving personal health goals within the role of the CHW.

CHWN 1200 Documentation, Legal, and Ethical Issues in Community Health Work

This course focuses on the legal and ethical dimensions of the Community Health Worker's (CHW) role. Included are boundaries of the CHW position, agency policies, confidentiality, liability, mandatory reporting, and cultural issues that can influence legal and ethical responsibilities. This course also focuses on the importance and ability of the CHW to gather, document, and report client visits and other activities. The emphasis is on appropriate, accurate, and clear documentation considering legal and agency requirements.

CHWN 1500 The Community Health Worker: Health Promotion Competencies 5 cr

This course focuses on the role of the Community Health Worker in health promotion and disease prevention/management including cultural navigation, social determinants of health, connections to resources, and supporting clients and families.

CHWN 2096 Community Health Worker Navigator Internship

The goal of the Community Health Worker/Navigator Internship is to provide students the opportunity to use the skills and tools they have learned and apply them to assigned agency's needs. Students will apply these skills of advocacy and outreach to help individuals and families reduce health disparities. Students will be required to complete a minimum of 80 hours of on the job training and coursework. The on the job weekly hours requirement will be an agreement between the organization, student and faculty advisor.

CIM - Computers Information Management

CIM 1000 Keyboarding and Essential Computer Skills 3 cr

This is a course to develop mastery of computer keyboarding, essential computer skills, and introductory word processing. Computer keyboarding includes keying by touch no less than 30 words a minute with emphasis on proofreading and accuracy. Essential computer skill includes file management, creating and editing documents, and Normandale's learning management system (D2L). Students will apply their skills to create emails, memos, letters, and multiple page documents in a Windows environment. Recommended first year course so that skills and knowledge can be applied to other Normandale courses.

CIM 1052 Desktop Publishing

Designing and producing information-oriented publications utilizing a personal computer and page-layout software. Prerequisite: CIM 1201 or BUSN 1201.

CIM 1101 Computer Basics

1 cr

Information about computers that provides the foundation for understanding how computers operate, how they are used in industry, and how they improve communications. Hands-on work with major applications not included.

CIM 1111 Word Processing 1

1 cr

Same word processing content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

CIM 1121 Spreadsheets 1

2 cr

3 cr

1 cr

Same spreadsheet content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

CIM 1131 Database Management 1

1 cr

Same database management content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

CIM 1141 Presentation Graphics 1

1 cr

Same presentation graphics content that is presented in CIM 1201, using the most current release of software. Prerequisite: Eligible for READ 0860 and ENGC 0800 this course is taught using Microsoft Office latest version business software for a PC.

CIM 1201 Information Technology Concepts and Business Software 1 3 cr

The purpose of the course is to prepare students for their future academic and professional pursuits using computers. The outcomes are designed to give students the tools to exceed the minimum expectations of employers. The course includes computer concepts and computer application software. The students will learn computer concepts of how computers operate, how they are used in industry, and how they improve communications. They will learn computer hardware, software and development, personal productivity software, data communications, the World Wide Web and e-mail, the social challenge, and career options. The students will learn computer application software using document production in word processing, spreadsheets, and database management. Students will create text-based documents to include letters, research reports in MLA and APA formatting with citations, one-page brochure with clip art, page and section breaks, reviewing/tracking features, and creating a resume as a web page; use the formula features, charting, functions, pivot tables and goal seeking for spreadsheets; and use the database features to create tables and reports, import data from Excel, set validation rules, and establish referential integrity of data including sorting and querying to gain skills to use in other courses or in the workplace. This course is required for most upper level Management Information Systems classes at 4-year colleges.

Prerequisite: Eligible for READ 0860 and ENGC 0900. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: BUSN 1201.

CIM 1212 Word Processing 2

1 cr

Same word processing content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1111. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

CIM 1220 Business Problem Solving Analyzing – Excel 3 cr

Emphasizes worksheet formatting, formula design, advanced functions, macro commands (Visual Basic for Applications), graphing, PivotTables, and data analysis. Students will learn features using business scenarios. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Excel Certified Application Specialist Exam.

Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: BUSN 1220.

CIM 1222 Spreadsheets 2

1 cr

Same spreadsheet content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1121 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

CIM 1230 Business Information Management – Access 3 cr
Emphasizes creating and maintaining a database, creating
simple and advanced queries, creating standard and
custom forms and reports, enhancing table design,
automating tasks with macros, managing and securing a
database. After taking this course, students will be
prepared to take the Microsoft Office Systems (MOS)
Access Certified Application Specialist Exam.
Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or
completion of equivalent computer competency tests
administered by Normandale's CIM Department and
eligible for READ 1106 and ENGC 1101.

CIM 1232 Database Management 2

1 cr

Same database management content that is presented in CIM 1201 and BUSN 1201.

Prerequisite: CIM 1131 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

CIM 1240 Business Word Processing

3 cr

This course provides skills for students in word processing to be successful in the work place, thus increasing opportunities for employment. Students will use the latest release of word processing application software to create and maintain documents, enhance page layout, create tables and reports, and use templates to create professional business documents. After taking this course, students will be prepared to take the Microsoft Office Systems (MOS) Word Certified Application Specialist Exam. Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101.

CIM 1242 Presentation Graphics 2

1 cr

This course is taught using Microsoft Office latest version business software for a PC.

Prerequisite: CIM 1141 Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

CIM 1250 Intro to Project Management Software

An introduction to project management using MS Project. Includes topics such as project management terminology, navigation in MS Project, creating and editing a project schedule, working with charts, resources and filters, tracking progress and costs, and closing a project. Provides a foundation for globally recognized Project Management Institute credentials such as CAPM and PMP. Prerequisite: CIM 1201 or BUSN 1201 (C or higher) or completion of equivalent computer competency tests administered by Normandale's CIM Department and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC. Cross-Listed as: BUSN 1250.

CIM 1260 Presentation Software

3 cr

The purpose of this course is to prepare students for their future academic and professional pursuits. Students will use the latest release of presentation software to plan and create presentations, print slides, handouts and speaker notes, apply themes, slide transitions, and animation. After taking this course students will be prepared to take the Microsoft Office Systems (MOS) PowerPoint Specialist Certification Exam.

Prerequisite: CIM 1201, BUSN 1201 (C or higher) and eligible for READ 1106 and ENGC 1101. Recommended: Keyboarding and proofreading skills. This course is taught using Microsoft Office latest version business software for a PC.

CIM 1900 Topics in Computers/Information Management

1-3 cr

Examination of a special topic in computer applications; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

CIM 2000 Computer Applications Training Practicum 3 cr

This is a capstone course designed to be taken by students in their final semester of the Computer Information Management AAS degree. The course ties together the key learning objectives students are expected to master during the program. The course also serves as a training and development experience to reinforce computer applications skills and knowledge. Students will practice problem-solving skills by tutoring computer users and responding to typical technical application issues in business, office, classroom/training, emails, or videoconferencing settings.

Prerequisite: BUSN or CIM 1201 (C or higher); BUSN or CIM 1220 (C or higher); keyboarding skills of at least 35 words per minute and consent of Computers/Information Management Program Coordinator.

CIM 2096 Internship in Computers/Information Management

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Computers/Information Management and consent of instructor and the Center for Experiential Education.

CIM 2900 Topics in Computers/Information Management

Examination of a special topic in computer applications; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

COMM - Communication

COMM 1100 Introduction to Communication

3 cr

1-3 cr

The primary purpose of this course is to provide students an introduction to the field of communication. Students will practice and develop skills in the areas of interpersonal communication, public speaking, and small group communication.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

COMM 1101 Fundamentals of Public Speaking

3 cr

The primary purpose of this course is to provide instruction and practical experience in the basic fundamentals of effective public speaking. Students will prepare, perform, and evaluate a variety of speeches throughout the semester.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

COMM 1106 Mass Media

3 cr

The purpose of this course is to develop media literate citizens through the examination of the nature, function, history, and effects of mass media. Emphasis will be placed on developing a critical awareness of mass media (print media, radio, film, music, television, social media, video games, etc.), advertising, media ethics, and societal impact.

MnTC Goals: 5, 9.

COMM 1111 Interpersonal Communication

The primary purpose of this course is to assist the student in examining and developing competence as an interpersonal communicator. Students will practice skills and learn strategies to develop and manage relationships more effectively in a variety of contexts.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

COMM 1113 Strategic Communication: Advertising and Public Relations 3 cr

This course explores the principles, practices, and ethics of strategic communication used in advertising and public relations. It examines the role of advertising and public relations in the historical and modern world of communication. By using an active learning approach, students will research, create, and evaluate advertising and public relations messages.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 9.

COMM 1121 Small Group Communication

The primary purpose of this course is to assist the student in understanding and applying small group communication principles. Students will develop skills while participating in groups, completing group projects, and analyzing group processes.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

COMM 1131 Intercultural Communication

The primary purposes of this course are to raise awareness of cultural values, beliefs, norms, and biases and address how culture affects communication choices on the interpersonal, group, cross-cultural, and global levels. Issues of nationality, race, ethnicity, class, gender, religion, etc., will be addressed.

Recommended: COMM 1111 and eligible for ENGC 1101 and READ 1106.

MnTC Goals: 7, 8.

COMM 1141 Nonverbal Communication

Nonverbal messages as a formal message system used to communicate. Focuses on the major areas of nonverbal messages. Identifies how nonverbal messages differ according to gender, culture, and power and how this translates into various contexts such as education, business, environment, and interpersonal relationship development.

Recommended: COMM 1101 or COMM 1111 and eligible for ENGC 1101 and READ 1106 MnTC Goals: 7.

COMM 1151 Storytelling

3 cr

3 cr

3 cr

3 cr

The primary purpose of this course is to discover the cultural and personal connections in oral storytelling. Through critical analysis and performance, students will explore the art of storytelling. Emphasis will be given to vocal and physical delivery elements as a means to communicate the message of cultural and personal narrative. Students will perform a variety of stories. Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

COMM 1450 Interactive Digital Communication

3 cr

This course is aimed at helping students master the latest interactive tools for communicating on the world wide web and the strategies and theories employed in their development and use.

COMM 1900 Topics in Communication

1-4 cr

An examination of a special topic in the field of communication; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

COMM 2096 Internship in Communication

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience in work at sites such as TV stations, newspapers, cable broadcast, and public relations agencies. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Communication and consent of instructor and the Center for Experiential Education.

COMM 2111 Family Communication

3 cr

This course explores how communication functions within families to develop, maintain, enrich, or limit family relationships. Descriptive rather than prescriptive, the course emphasizes understanding families as unique communication systems embedded within sub-cultural and cultural ecosystems. Awareness of the functions of communication in families can help students understand more about how and why their families behave as they do. The course also provides several theoretical approaches to help students better understand the interactional dynamics occurring within their family or families.

Recommended: COMM 1111 and eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5.

COMM 2900 Topics in Communication

An examination of a special topic in the field of communication; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

COMT - Computer Technology

COMT 1107 Introduction to Computer Technology 4 cr

Topics associated with computers and computing: input/output, central processing unit, storage devices, programming languages, operating systems, PC software programs, security and privacy issues, and trends in computing.

COMT 1173 PC Architecture Operation and Interface 3 cr Introductory course on the architecture of computers. Using the PC as a representative architecture, the primary components of the PC and their interfaces are examined. Function of the operating system and its interaction with the computer hardware. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology.

Prerequisite: COMT 1107.

COMT 1181 Database Management Systems

Various database models with emphasis on the relational model. Data relationships and attributes, the use of entity relationship diagrams, and data mapping operations. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology. Prerequisite: COMT 1107.

3 cr

3 cr

3 cr

COMT 1182 Advanced Database Management Systems 3 cr

This course will present advanced features of relational database including concurrency control, query optimization, distributed databases, and database administration. It will present many of the constructs of SQL (Structure Query Language), including queries, updates, and deletes. It will provide students with the tools and techniques for report generation.

Prerequisite: COMT 1181.

COMT 1184 Telecommunications

Aspects of telecommunications such as network topology, standards, OSI model, media, modems, data compression, data security, and the Internet. Must be completed within the last seven years prior to receiving the AAS degree in Computer Technology.

Prerequisite: COMT 1107.

COMT 1205 Introduction to Visual Basic

This course introduces the Visual Basic programming language through hands-on development of projects of increasing complexity as the student gains increased understanding of the language. The course will include forms, controls, menus, programming fundamentals, syntax, and file formats. Must be completed within the last seven years prior to receiving the AAS degree or certificate in Computer Technology.

COMT 1900 Topics in Computer Technology

3 cr

2-4 cr

An examination of a special topic in computer technology; intended for all interested students. Topics may include hardware structures of PCs, hardware/software interactions, structure of programming language, input/output. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

Education.

COMT 2096 Internship in Computer Technology

This internship course explores careers and training in a supervised work setting. Combines theory with field experience for students to gain enhancement of computer skills through a computer-related job experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline. Prerequisite: Previous coursework in Computer Technology and consent of instructor and the Center for Experiential

COMT 2186 Microprocessors and Digital Logic (Lecture only)

3 cr

Basic building blocks of digital logic-gates, flip-flops, shift registers. These building blocks are used to create more and more complex forms with the microprocessors being a programmable logic element. Comparison between hardwired and software-based elements are developed as well. There is no laboratory and the prerequisite for ENGT 1153 is waived. Must be completed within the last 7 years prior to receiving the AAS degree or certificate in Computer Technology.

Prerequisite: COMT 1107 or COMT 1173 (C or higher).

COMT 2188 Systems Analysis and Design

The total environment of a computer-based system - analysis, design, implementation, and maintenance. Concepts and tools used in the system development life cycle and analysis of large systems are introduced. Must be completed within the last 7 years prior to receiving the AAS degree in Computer Technology.

Prerequisite: COMT 1173 (C or higher). Offered: Spring.

COMT 2201 Preparation for the A+ Exam

2 cr

The A+ Certification course covers the topics required for the two qualifying exams of the A+ certification, Core Hardware, and OS Technologies, (the exams are administered by third-party examiners selected by Comp TIA). The course consists of lecture materials covering exam topics as well as a hands-on laboratory component where the student replaces and updates major components of a personal computer.

Prerequisite: COMT 1173.

COMT 2250 Object Oriented Programming with Java for HCST

This course enables students to learn object oriented programming principles using the Java programming language. Students will become familiar with Java techniques that are widely used in the industry, including best practices for the implementation of component based software architecture.

Prerequisite: Eligible for CSCI 1101 and COMT 2188.

COMT 2900 Topics in Computer Technology

3 cr

4 cr

An examination of a special topic in computer technology. Intended for second-year students. Topics may include hardware structures of PCs, hardware/software interactions, structure of programming language, and input/output. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

CSCI - Computer Science

CSCI 1100 Fundamentals of Computers

4 cr

4 cr

Overview of the computer system: the CPU and chip technology, input and output, storage devices, communications and networks, the Internet and World Wide Web, programming and languages, operating systems, applications software, security, privacy and ethics, artificial intelligence, expert systems and robotics, virtual reality, ergonomics, Windows, word processing, spreadsheets, database management systems, presentation graphics.

CSCI 1101 Introduction to Computing and Problem 4 cr Solving

Problem solving techniques in computer programming. A structured approach to algorithm development to solve a large number of problems. Students will write pseudo code to develop problem solving skills. They will write simple programs in one or more programming languages. Prerequisite: MATH 0700 or MATH 0670 (C or higher) or eligible for MATH 1100.

CSCI 1111 Introduction to Programming in C

will include the syntax of the language, operators and expressions, control structures, scoping rules, functions, parameter passing, arrays, strings, pointers, structures, type definitions, file handling, libraries.

Problem solving using the C programming language. Topics

Prerequisite: CSCI 1101.

CSCI 1113 Intro to C/C++ for Engineers

Programming for scientists/engineers. C/C++ programming constructs, object-oriented programming, software development, fundamental numerical techniques; exercises/examples from various scientific fields. Prerequisite: MATH 1510.

CSCI 1202 **Introduction to Object-Oriented Programming** in C++ 4 cr

Programming in C++ and concepts of C++, with an emphasis on programming techniques and object-oriented programming. Must be completed within the last 7 years prior to receiving the AAS degree in Computer Technology. Prerequisite: CSCI 1111.

CSCI 1203 Introduction to Computer Programming in Java 4 cr Introduction to object-oriented programming using the Java programming language. Use of Java for developing conventional applications and Internet-based applications will be examined. Must be completed within the last seven years prior to receiving the AAS degree in Computer Technology.

Prerequisite: CSCI 1111.

CSCI 1900 Topics in Computer Science

1-4 cr

4 cr

Topics of current interest in the computer sciences, including specialized language courses and operating system courses. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

CSCI 2001 Computer Programming Concepts

4 cr

Introduces students to the fundamental principles of programming. Procedures, recursion, and iteration will be presented as algorithmic development techniques. Abstract data types, modularity and the use of abstraction to hide program details will be emphasized throughout the course. The computer language Python is used as a formal way of expressing algorithms and data.

Prerequisite: CSCI 1101 and MATH 1510 or concurrent registration.

CSCI 2002 Algorithms and Data Structures

Reinforces the concepts presented in CSCI 2001, such as data abstractions, from an object-oriented programming perspective. Introduces data structures such as stacks, queues, and trees, and introduces sorting algorithms. Students will implement data structures and their operations as abstract data types using an object-oriented approach. The programming language Java is used to express the concepts of the course.

Prerequisite: CSCI 1111 and CSCI 2001.

CSCI 2011 Discrete Structures of Computer Science

Concepts fundamental to the analysis of algorithms. Topics include logic, sets, methods of proof including mathematical induction, combinatorics, relations, solution of recurrence relations, graphs, trees.

Prerequisite: MATH 1510. Cross-Listed as: MATH 2011.

MnTC Goals: 4.

CSCI 2021 Machine Architecture and Organization

Introduction to computer organization, machine language, and use of assembly language programming using the Motorola 680x0.

Prerequisite: CSCI 1101 and experience with C, C++, or Java.

CSCI 2031 Introduction to Numerical Computing

Introduction to numerical analysis. Explores various numerical methods for solving scientific and technical problems including Newton's method, numerical integration, and a variety of interactive methods.

Prerequisite: MATH 1520 and proficiency with C, C++, or Java. Cross-Listed as: MATH 2031.

CSCI 2033 Elementary Computational Linear Algebra 4 cr

Matrices and linear transformations, basic theory, linear vector spaces, inner product spaces. Systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods using MATLAB. Use of matrix methods to solve a variety of computer science problems.

Prerequisite: MATH 1510. Cross-Listed as: MATH 2033.

CSCI 2096 Internship in Computer Science 2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Computer Science and consent of instructor and the Center for Experiential Education.

CSCI 2900 Topics in Computer Science

including specialized language courses and operating system courses. Intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Special topic of current interest in the computer sciences,

Prerequisite: Topic-dependent.

DSCI - Data Science

DSCI 2000 Foundations of Data Science

3 cr

An introduction to Data Science and Data Analytics. Various mathematical and statistical techniques and software tools will be used to analyze a variety of data sets in order to develop basic skills and gain a general understanding of the field.

Prerequisite: MATH 1080 or MATH 1090 or MATH 2400 or BUSN 2220, and CSCI 1111 or CSCI 1113 or COMT 2250. DENH - Dental Hygiene

DENH 1112 Oral and Facial Anatomy

3 cr

Study of the structures of the head, neck, and oral cavity. Topics include histology, embryology, tooth morphology, eruption patterns of the teeth, head and neck anatomy, and occlusion as it relates to the practice of dental hygiene. Practical laboratory exercises.

Prerequisite: Acceptance into Dental Hygiene Program.

DENH 1140 Pre-Clinic Theory

3 cr

4 cr

Introduction to the fundamentals of dental hygiene care. Emphasis on infection control, patient assessment, emergencies, the special needs patient, periodontal disease process, patient self-care and dental deposits. Practical application experience in pre-clinical skill development. Lecture 3 hours.

Prerequisite: Acceptance into Dental Hygiene Program.

Corequisite: DENH 1141.

DENH 1141 Pre-Clinic Skill Development

Skill development sessions are structured to develop actual experience in infection control procedures, patient assessment, instrumentation skills, dental emergencies, deposit removal, mechanical polishing, and topical fluoride application. Small groups will be utilized for practical application skills with students working on each other. Lab/clinic 8 hours.

Prerequisite: Acceptance into Dental Hygiene Program.

Corequisite: DENH 1140.

DENH 1142 Clinic 1 Theory

2 cr

1-4 cr

4 cr

4 cr

Continuation in the study of the dental hygiene care process. Emphasis on professionalism, patient care planning, record keeping, periodontal conditions, scaling/root planing, dentifrices, mouth rinses, dental caries process, dietary counseling, saliva, dentinal hypersensitivity, and fluoride. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, DENH 1112, DENH 1140 and DENH 1141. Corequisite: DENH 1143.

DENH 1143 Clinic 1

4 cr

Students begin fundamental patient care by providing clinical, preventive, educational, and therapeutic service in a supervised clinical setting. Clinic 8 hours.

Prerequisite: Acceptance into Dental Hygiene Program,
DENH 1112, DENH 1140 and DENH 1141. Corequisite:
DENH 1142.

DENH 1150 Dental Radiology

4 cr

Theory, techniques, and procedures for exposing and processing dental radiographs; interpretation of dental radiographs, radiation safety, and practical application in dental radiography lab and clinical setting. Lecture 3 hours; lab/clinic 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1112. Corequisite: DENH 1142 and DENH 1143.

DENH 1151 Accelerated Dental Radiology

2 cr

Theory, techniques, and procedures for exposing and processing dental radiographs; interpretation of dental radiographs, radiation safety, and practical application in dental radiography lab and clinical setting. Lecture 3 hours; clinic 2 hours last five weeks of semester.

Prerequisite: Acceptance into Dental Hygiene Program, and instructor's permission. Corequisite: DENH 1142 and DENH 1143.

DENH 1160 Dental Materials

2 cr

1 cr

2 cr

The study, demonstration, and manipulation of materials used in dental and dental hygiene procedures. Lecture online; lab 3 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1140, DENH 1141 and CHEM.

DENH 1161 Accelerated Dental Materials

The advanced study, demonstration, and manipulation of materials used in dental and dental hygiene procedures. Dates and times are determined by course instructor. Prerequisite: Acceptance into Dental Hygiene Program, and instructor's permission. Corequisite: DENH 1140, DENH 1141 and CHEM 1050.

DENH 1162 Pharmacology for the Dental Hygienist

This course focuses on applying pharmacology knowledge to dental hygiene clinical practice. Understanding drug groups, pharmacologic effects, adverse reactions, drug contraindications, and interactions will encourage treatment modification and ensure safe patient care. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1140 and BIOL 2042. Corequisite: DENH 1142 and DENH 1143.

DENH 1900 Topics in Dental Hygiene

1-4 cr

Skill development in various special areas of dental hygiene; intended for any interested dental hygiene student. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

DENH 2096 Internship in Dental Hygiene

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Dental Hygiene and consent of instructor and the Center for Experiential Education.

DENH 2240 Clinic 2 Theory

2 cr

Emphasis on advanced clinical procedures, professionalism, ethics, quality assurance, and evidence-based dental hygiene practice. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1142. Corequisite: DENH 2241.

DENH 2241 Clinic 2

6 cr

Continuation of patient care by providing clinical, preventive, educational, and therapeutic services in a supervised clinical setting. Clinic 12 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and

DENH 1143. Corequisite: DENH 2240.

DENH 2242 Clinic 3 Theory

2 cr

Orientation to ethics, jurisprudence, dental specialties, practice management, job placement, resumes, interviewing skills, and career opportunities. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1142, DENH 2240, DENH 2241 and DENH 2264. Corequisite: DENH 2241.

DENH 2243 Clinic 3

Continuation of patient care to attain clinical competency in preparation for practical examinations and licensure. Clinic 12 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 2240, DENH 2241 and DENH 2264. Corequisite: **DENH 2242.**

DENH 2244 Clinical Enrichment 1-3 cr

This course is designed to offer students additional skill development in areas of clinical dental hygiene and/or

Prerequisite: DENH 2241 or DENH 2243 and instructor's permission.

DENH 2252 Clinical Radiology 1

Practice of radiographic technique and radiographic interpretation in a clinical setting. Clinic 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1150. Corequisite: DENH 2241.

DENH 2254 Clinical Radiology 2

1 cr

1 cr

Practice of radiographic technique and radiographic interpretation in a clinical setting. Clinic 2 hours. Prerequisite: Acceptance into Dental Hygiene Program, DENH 1150 and DENH 2252. Corequisite: DENH 2243.

DENH 2263 Pain Management

2 cr

Preparation of the dental hygiene student in effective and safe administration of local anesthesia and nitrous oxideoxygen inhalation sedation. Lecture 1 hour; lab/clinic 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and in the process of developing competence in clinical dental hygiene care, DENH 1142, DENH 1162 and BIOL 2042.

DENH 2264 Periodontics for the Dental Hygienist 2 cr

The study of periodontal diseases as the scientific basis for dental hygiene with recognition of the etiologic factors and abnormal conditions in the supporting structures with emphasis on the role of the dental hygienist in the philosophical and clinical approaches to periodontal therapy. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, BIOL 2204 or 2043, DENH 1112, DENH 1142, DENH 1143. Corequisite: DENH 2240 and DENH 2241.

DENH 2266 General and Oral Pathology 2 cr

The identification, pathogenesis, histology, prevention and management of oral diseases; the oral manifestations and complications associated with systemic diseases; and the basic principles and aspects of pathology related to dental healthcare. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, and DENH 1112 and DENH 2240 and DENH 2241 and DENH 2264. Corequisite: DENH 2240 and DENH 2241 and DENH 2264.

DENH 2281 Preventive Concepts in Community Dental Health

Introduction to federal, state, and local public health programs. Epidemiology, prevention and control of oral diseases at the community level. Principles of assessment, diagnosis, planning, implementation, evaluation, and documentation of dental public health programs. Implementation of a community oral health service project in an extramural setting. Lecture 2 hours.

Prerequisite: Acceptance into Dental Hygiene Program, .

DENH 2900 Topics

1-4 cr

2 cr

Skill development in various special areas of dental hygiene; intended for second-year dental hygiene students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

EAP-English for Academic Purposes

This course for non-native speakers of English provides instruction in the academic speaking and listening skills necessary for college success. Topics include note-taking, discussion groups, class presentations, and interactions with the wider college community. Instruction in American English pronunciation will be included as necessary. Grading options are A-F or P/NC.

Academic Speaking and Listening Skills

Prerequisite: Eligible for EAP 0750 and EAP 0850 or

higher.

EAP 0655

EAP 0750 EAP Grammar and Writing 1

5 cr

3 cr

This course for non-native speakers of English provides instruction in grammar and writing for intermediate EAP students. Topics include verb tenses, sentence skills, mechanics, and beginning paragraph writing skills. Grading options are A-F or P/NC.

Prerequisite: Eligible for EAP 0750 and EAP 0850 or higher.

EAP 0760 EAP Grammar and Writing 2

This course for non-native speakers of English is a continuation of EAP 0750. It provides instruction in grammar and writing for high-intermediate EAP students. Topics include verb tenses, clauses, pre-writing, organization, and paragraph writing. Students must pass both the course and an exit exam. Grading options are A-F or P/NC.

Prerequisite: EAP 0750 (C/P or higher) or eligible for EAP 0760 and EAP 0850 or higher.

EAP 0850 Reading and Vocabulary 1

3 cr

This course for non-native speakers of English improves their literal reading comprehension skills and introduces them to higher-level reading and thinking skills. Grading options are A-F or P/NC.

Prerequisite: Eligible for EAP 0750 and EAP 0850 or higher.

EAP 0855 EAP Reading and Vocabulary 2

4 cr

This course for non-native speakers of English builds on the skills of EAP 0850. Students will continue to improve their literal and inferential reading skills in a variety of genres. In addition, they will continue to work on improving their vocabulary. They will also begin to understand complex written processes and analyze several features of fiction. Grading options are A-F or P/NC.

Prerequisite: EAP 0850 (C/P or higher) or eligible for EAP 0750 and EAP 0855 or higher.

EAP 1000 Introduction to College

1 cr

1-4 cr

This course for non-native speakers of English introduces students to the skills, strategies, and resources needed for a successful start to college in the U.S. Students will practice reading, writing, listening, and speaking skills as they complete the assignments.

Prerequisite: Eligible for EAP 0750 or EAP 0760 and eligible for EAP 0850 or EAP 0855.

EAP 1900 Topics in English for Academic Purposes

Examination of a special topic in English for Academic Purposes; intended for first-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

EAP 2900 Topics in English for Academic Purposes 1-4 cr

Examination of a special topic in English for Academic Purposes; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ECON - Economics

ECON 1100 Personal Finance

3 cr

A survey of cash management, credit management, housing, taxes, insurance, investing, and retirement planning. Tools and strategies for making responsible financial decisions and improving one's financial well-being. How to craft financial plans consistent with one's goals and values.

Recommended: Eligible for READ 1106.

MnTC Goals: 9.

ECON 1200 Consumer Economics

3 cr

Economic principles relevant to consumers; consumer information gathering and decision-making; consumer issues and problems. Laws, government regulations, and policies affecting consumers.

Recommended: Eligible for READ 1106.

MnTC Goals: 5, 9.

ECON 1400 Survey of Economics

3 cr

A survey of microeconomic and macroeconomic principles illustrated by a discussion of current economic policies, issues, and problems. This course cannot be taken for credit after ECON 2201 or ECON 2202. This course is not intended to satisfy the entrance prerequisites for most four-year programs in economics, business, or accounting. Recommended: Eligible for READ 1106.

MnTC Goals: 5, 9.

ECON 1900 Topics in Economics

1-3 cr

Examination of a special topic in economics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ECON 2096 Internship in Economics

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Economics and consent of instructor and the Center for Experiential Education.

ECON 2201 Principles of Microeconomics

3 cr

Theories of how various types of product, service, and resource markets operate and resulting implications for public policy. Decision-making by consumers, business firms, and government. Price determination, resource allocation, and income determination via markets. Recommended: READ 1106.

MnTC Goals: 5, 9.

ECON 2202 Principles of Macroeconomics

3 cr

Theories that explain the overall performance of the economy. Measurement of national income, unemployment, and inflation; role of money and the banking system. Policies that stabilize the economy and promote economic growth. International trade and finance within the framework of the global economy.

Recommended: READ 1106.

MnTC Goals: 5, 8.

ECON 2900 Topics in Economics

1-3 cr

Examination of a special topic in economics; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

EDUC - Education

EDUC 1101 Introduction to Education

4 cr

Introduction to Education provides an overview of the education profession and the U.S. educational system, including historical development, social foundations and educational institutions. Other topics include current theories, trends and issues in education and the community, certification standards, roles and responsibilities of teachers, learners, and other school personnel, introductory instructional methods and classroom environment strategies, and a field experience/practicum. Every student must complete a field experience in an area school. Students must receive a grade of C or higher to take subsequent EDUC courses.

EDUC 1120 Spanish for Educators 1

3 cr

Spanish for Educators 1 is the first of two courses designed for English-speaking educators and future educators who need to acquire vocabulary and develop basic Spanish skills in order to communicate with Spanish-speaking students and their parents on a variety of school-related topics. In addition, the course seeks to provide learners with an understanding of key concepts about Hispanic culture which influence interactions in educational settings. Cross-Listed as: SPAN 1120.

EDUC 1220 Spanish for Educators 2

3 cr

Spanish for Educators 2 is the second of two courses designed for English-speaking educators who need to develop basic conversational Spanish skills in order to communicate with Spanish-speaking students and their parents on a wide variety of school-related topics. In this course, students will learn to construct sentences and questions using twelve "high-frequency" structures in Spanish, along with one hundred and twenty verbs relevant to educational settings. Students continue to develop vocabulary related to classroom and school settings. Situational dialogues and role-plays are an important part of this course. Along with developing conversational skills, attention is given to further development of beginning listening, reading and writing skills. Cultural practices and perspectives are presented through the art and literature of the Spanish-speaking peoples. The cultural components in Spanish for Educators 2 are designed to encourage teachers to use authentic Hispanic art and literature in their own classrooms or school communities to raise awareness and understanding about the cultures of Spanish-speaking peoples in Minnesota and the United

Prerequisite: EDUC 1120. Cross-Listed as: SPAN 1220.

EDUC 2096 Internship in Education

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience in schools and similar educational sites. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline. Prerequisite: Previous coursework in Education and Consent of instructor and consent of the Center for Experiential Education.

EDUC 2101 Educational Technology

3 cr

This course is designed to provide opportunities to explore and develop skills, using current technology platforms, software and formats; demonstrate the current best practices of using technology as a tool to enhance learning; integrating technology platforms in today's kindergarten through twelfth-grade classrooms; and raising awareness of technological accessibility tools that could meet the needs of students with impairments or disabilities. A grade of C or higher is required in EDUC 1101 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher).

EDUC 2222 Multicultural Education and Human Relations in Schools 3 cr

Multicultural Education and Human Relations in Schools, introduces pre-service teachers to core concepts and approaches to multicultural education including issues related to student, family, and community diversity based on culture, language, race, class, gender, sexual identity, and disability. Issues discourses, hierarchy of education with regards to privilege, equity and access to high quality education are topics addressed as students use knowledge of their life experiences and those of diverse students in urban and rural public schools and learn culturally and linguistically responsive classroom strategies. Emphasis is placed on demonstrating the multicultural competence required of all successful teachers working with today's diverse youth. A grade of C or higher is required in EDUC 1101 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher).

EDUC 2223 Foundations of Instruction

2 cr

Foundations of Instruction will allow students to apply their knowledge of cognitive, moral, social, emotional and physical development, and individual variations, to instructional strategies and learning activities. Students will be able to create appropriate lessons and learning activities given the levels of development of children. A grade of C or higher is required in EDUC 1101 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher).

EDUC 2331 Professional Practice and Design of Individual Education Programs 2

This course will introduce teacher candidates to different aspects of being a Special Educator, including writing Individualized Education Program plans, communicating and working collaboratively, addressing strategies for working with paraprofessionals, and developing an understanding of collaboration, including co-teaching in the classroom to assist student learning and communicating effectively with parents and co-teachers. A grade of C or higher is required in EDUC 1101 and EDUC 2408 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher) EDUC 2408 (C or higher).

EDUC 2408 Individuals with Diverse and Exceptional Needs 4 cr Individuals with Diverse and Exceptional Needs is designed to provide an introduction and overview of the characteristics and educational needs of children and youth with diverse and exceptional needs in all schools. The course introduces students to the language of Special Education used in Minnesota. A grade of C or higher is required in EDUC 1101 and PSYC 1109 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher) and PSYC 1109 (C or higher).

EDUC 2409 Learning and Human Development for Diverse Learners 4 cr

Learning and Human Development for Diverse Learners is designed to introduce students to theories of learning and human development as they relate to diverse learning populations. Students will acquire an understanding of the many factors that affect learning and human development as well as strategies that can be used to enhance learning for all populations. A grade of C or higher is required in EDUC 1101 and PSYC 1109 in order to register for this course.

Prerequisite: EDUC 1101 (C or higher) and PSYC 1109 (C or higher).

ENGC-English Composition

ENGC 0800 Fundamentals of Writing

4 cr

This course focuses on the skills needed to produce paragraphs and short essays. During the semester, students 1) read and critically evaluate a variety of texts; 2) understand the planning and writing process for paragraphs and short essay writing; 3) communicate clear ideas, developing paragraphs with main points, supporting details, and logically sequenced sentences; 4) develop conventional grammatical sentence structure, punctuation, and spelling; 5) practice strategies to develop vocabulary and word usage skills; 6) create documents using word processing software. Grading options are A-F or Pass/No Credit. A grade of Pass/C or better is required to register for ENGC 0900.

Prerequisite: Placement into ENGC 0800 and eligible for READ 0860 or a Pass/C or higher in EAP 0760 and eligible for READ 0860.

ENGC 0860 Integrated Reading and Writing 1

6 cr

Normandale's Integrated Reading and Writing program values students' diverse needs and experiences to empower them to develop agency and literacy in college and in life. In this specific course, which focuses on developing literacies, students will practice reading and writing in a variety of situations. Students will explore a variety of texts and their contexts by asking questions and pursuing answers through their own lived experience as well as others' ideas. Students will begin to develop reading and writing processes that build on and overlap with each other, which will help facilitate academic success. Through this process of integrated reading and writing, students will experience the transformative nature of literacy and its power to promote equity and justice. Grading method is A/F, with the option of Pass/No Credit.

Prerequisite: Completed EAP 0760 with a C/P or higher and EAP 0855 with a C/P or higher; OR placement into non-EAP coursework via HS GPA <2.0, ACCUPLACER Next Gen Read score <235, ACCUPLACER Classic Read score <60; OR ACCUPLACER Classic ESL Reading Skills score 97-109

ENGC 0900 Preparation for College Writing

This course focuses on writing skills needed to write essays. During the semester, students 1) understand the planning and writing process for thesis-focused, multiparagraph essays; 2) develop ideas in paragraphs containing a topic sentence, clear order, adequate detail, transitions, and a conclusion; 3) become familiar with the basic process of research and citation; 4) demonstrate conventional grammatical sentence structure, punctuation, and spelling; 5) move towards college-level vocabulary and usage. Sources for writing model analysis and study include published articles and essays and assigned student work. Grading options are A-F or Pass/No Credit. A grade of Pass/C (or higher) is required to register for ENGC 1101.

Prerequisite: ENGC 0800 (Pass/C or higher) and eligible for READ 0960 or eligible for ENGC 0900 and READ 0960.

ENGC 0960 Integrated Reading and Writing 2

Normandale's Integrated Reading and Writing program values students' diverse needs and experiences to empower them to develop agency and literacy in college and in life. In this specific course, which focuses on literacy proficiency, students will practice reading and writing in a variety of situations with specific attention to various academic disciplines. Students will explore a variety of texts and their contexts by asking questions and pursuing answers through their own lived experience as well as introductory research practices. Students will develop proficiency in reading and writing processes that build on and overlap with each other, which will help facilitate academic success. Through this process of integrated reading and writing, students will experience the transformative nature of literacy and its power to promote equity and justice. Grading method is A/F, with the option of Pass/No Credit.

Prerequisite: Completed ENGC 0860 with a C or higher; OR placement into non-EAP coursework via HS GPA 2.0 or higher, ACCUPLACER Next Gen: Read 235-249, ACCUPLACER Classic: Read 60-77; OR ACCUPLACER Classic: ESL Reading Skills 110-120

ENGC 1101 College Writing

4 cr

4 cr

6 cr

This course focuses on critical thinking and writing skills necessary in college and professional writing through text analyses and argument strategies. Students 1) study the writer's purpose, audience, and rhetorical structure in a variety of genres and college-level texts, 2) organize and develop clear, thesis-driven logical arguments in various personal and academic essays, 3) find sources, and synthesize, and document information in research-based academic essays, and 4) demonstrate proficient command of English writing conventions.

Prerequisite: ENGC 0900 (C or higher) and eligible for READ 1106 or eligible for ENGC 1101 and READ 1106. MnTC Goals: 1.

ENGC 1900 Topics in Composition

1-4 cr

Examination of a special topic or field in composition. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ENGC 2020 Advanced Grammar

3 cr

This course presents an overview of basic to advanced grammar concepts, their functions, and their varied and appropriate usage in written English at different levels. It also incorporates various explanations of how grammar is learned. Additional topics may include language acquisition and its cultural contexts.

Prerequisite: ENGC 1101 and eligible for READ 1106.

ENGC 2096 Internship in English Composition

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in English and consent of instructor and the Center for Experiential Education.

ENGC 2102 Business and Technical Writing 3 cr

Students will explore the forms of business and technical writing common in the professions through documents such as memos, emails, reports, proposals, instructions, sales messages, and technical descriptions. Students will produce documents while focusing on document design, ethical principles in communication, and developing of a keen sense of audience, purpose, and author through informed research.

Prerequisite: ENGC 1101.

MnTC Goals: 9.

ENGC 2900 Topics in Composition

Examination of a special topic or field in composition. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ENGL-English Literature

ENGL 1000 Introduction to Literature

3 cr

By reading a variety of literary works and discussing/interpreting them from multiple perspectives, students will learn to understand and enjoy literature. Prerequisite: Eligible for ENGC 0900 and READ 0960. MnTC Goals: 6.

ENGL 1021 Literary Magazine

3 cr

By reading, discussing and evaluating contemporary works written in a variety of genres, enrolled students will develop a critical appreciation for literature as a living art form and become "literary citizens," taking part in the reading, writing, publication and discussion of creative work through their work on the student literary journal, The Paper Lantern.

Prerequisite: Eligible for ENGC 0900 and READ 0960.

ENGL 1120 Graphic Novels

3 cr

Students will read, discuss, and analyze graphic novels from a variety of genres in terms of the interplay of word and image central to this narrative medium. Analysis will include looking at the ways graphic novels represent popular culture, politics, philosophy, history, social issues, and personal identity across multiple cultures.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 1130 Literature of Diversity

3 cr

Students will read, discuss, and write about literature written by Americans who have traditionally been underrepresented in the literary canon. The readings will include works by African Americans, Asian Americans, Latina/o Americans, Native Americans, and others, including American-educated writers born elsewhere. The writers will represent various literary periods, as well as genres, and will be discussed in socio-cultural and historical contexts. Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

ENGL 1140 Gender and Literature

3 cr

Read, discuss, and write about works of literature from a gender-focused perspective. Topics students may explore include literary images of men and women, representations of gender in literature, portrayals of gender-based attitudes and values, and the ways in which writing can change conventional views of gender.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 1170 Modern World Literature

3 cr

Students will study fiction, poetry, and drama by selected authors from Latin America, Continental Europe, Africa and the Middle East, and Asia and the South Pacific. As part of their study, students will analyze these texts within their diverse cultural and historical contexts, including selected literary movements. The course will primarily focus upon literature written from the early 18th century to the present.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 8.

ENGL 1175 Myths and Legends

3 cr

Students will study the myths and legends of ancient, classical, and medieval cultures from various parts of the world. Topics of study may include written works, transcriptions of oral works, and sacred texts, as well as contemporary re-imaginings of such works.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 8.

ENGL 1186 Introduction to Poetry

3 cr

Students will explore the way poets use words in concentrated form to convey sensory, emotional, imaginative, and intellectual experience. Students will practice close and full reading of a variety of poems, noting imagery, figurative language, sound, and tone.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 1188 Introduction to Short Stories

3 cr

Students will explore the short story form and its various effects. Students will improve critical reading and thinking skills by reading a variety of short stories, examining the essential techniques of short fiction, and considering multiple perspectives on a work of fiction.

Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

ENGL 1189 Introduction to the Novel

3 cr

Students will explore the novel form and its various effects. Students will improve critical reading and thinking skills by reading a variety of novels, and examining the essential techniques of longer fiction, and considering multiple perspectives on a work of fiction.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 1900 Topics in Literature

1-4 cr

Examination of a special topic or field in literature. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ENGL 2000 Introduction to Literary Studies: Writing About Literature 3 cr

This course introduces students to the discipline of literary studies, focusing on writing about literature using multiple critical lenses. The students write increasingly sophisticated essays analyzing literature and synthesizing critical sources while developing their understanding of audience and tone in writing.

Prerequisite: ENGC 1101 (C or higher) and eligible for

READ 1106. MnTC Goals: 6.

ENGL 2060 Children's and Young Adult Literature

3 cr

2-4 cr

Students will study literature written for children and young adults, from birth through high

school, to effectively select, evaluate, and appreciate this literature. Course material includes various formats (picture books, early readers, chapter books, middle grade books, young adult novels, or graphic narratives) and genres (traditional literature, fantasy, realism, historical fiction, factual books, or poetry). Topics include supporting young readers' selection of and responses to literature; studying the history of children's and young adult literature; responding to censorship and controversy; and introducing children and young adults to books about diversity (race, ethnicity, disability, etc.) and to works by under-represented populations and from a variety of cultures.

Prerequisite: ENGC 1101.

MnTC Goals: 6.

ENGL 2096 Internship in English Literature

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in literature and consent of instructor and the Center for Experiential Education.

ENGL 2120 Shakespeare 3 cr

Studying William Shakespeare's writing is a journey of discovery. This course is designed to start students on that journey as they discover the power of Shakespeare's language as well as his uncanny and modern insight into human nature. Students will read, discuss, and write about Shakespeare's plays and poems.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 2125 Novels of Jane Austen

3 cr

Students examine the six major novels of Jane Austen in sequence (*Northanger Abbey, Sense and Sensibility, Pride and Prejudice, Mansfield Park, Emma, and Persuasion*). This course offers an excellent opportunity to chart how an author develops the skills of characterization and plot development.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 2127 Sherlock Holmes and the Victorian Age 3 cr

This course examines classic literary works of the Victorian era through the lens of the Sherlock Holmes series of detective stories, investigating key themes and concerns of the age such as social class, the status of women and children, the role of science, and ethics as they are represented in literature of the period.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 2130 African American Literature

3 cr

3 cr

This course gives students an introduction to literature by African American writers representing multiple experiences and historical periods. The students will study various genres and will analyze the literary works in cultural and historical context through both discussion and written assignments.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 7.

ENGL 2133 Native American Literature

This course gives students an introduction to literature by Native American writers representing various tribal cultures and historical periods. The students will study multiple genres and will analyze the literary works in cultural and historical context through both discussion and written assignments.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 7.

ENGL 2150 American Literature 1

4 cr

Students will read works by a variety of authors representing the diverse viewpoints and experiences of Americans before the modern era.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6. 9.

ENGL 2151 American Literature 2

4 cr

Students will read works by a variety of authors representing the diverse viewpoints and experiences of Americans during the modern era.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 9.

ENGL 2160 British Writers 1

Students will read works written by a variety of authors from the Middle Ages through the 18th century.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 2161 British Writers 2

4 cr

Students will read works by a variety of authors of the 19th and 20th centuries.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

ENGL 2174 African Literature

3 cr

Students will study a range of African Literature in English, exploring distinctive features of several African regions. Focusing mainly on fiction genres (novels, short stories, drama) and poetry, the instructor may also use some nonfiction, including memoir, critical essays, and contextual documents. As part of their study, students will analyze these texts within their cultural and historical contexts. The course will primarily focus on literature written during the modern period (1700 - present).

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6, 8.

ENGL 2900 Topics in Literature

1-4 c

4 cr

1-4 cr

Examination of a special topic or field in literature. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ENGR - Engineering

ENGR 1020 Introduction to Engineering Design

A lower division course for students in the engineering disciplines. This course will: develop skills used by practicing engineers; provide extensive exposure to visual, written and oral communication forms and to computer-based design tools; include substantial design projects, including prototype construction.

Prerequisite: Eligible for MATH 1510.

ENGR 1900 Topics in Engineering

An examination of a special topic in engineering; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

ENGR 2015 Linear Circuit Analysis 4 cr

This course introduces linear circuit analysis with emphasis on audio applications and signals. Topics include: physical principles underlying circuit element models; resistive circuits; Kirchhoff's laws; independent and dependent sources; node- voltage and mesh-current methods; operational amplifiers; inductors and capacitors; and first-and second-order circuits. Laboratory includes experiments with simple circuits and audio electronics, and familiarization with measurement tools and equipment. Lecture 3 hours; lab 2 hours. Prerequisite: PHYS 1121 (C or higher) and PHYS 1122 (C or higher) or concurrent registration, and MATH 1520 (C or higher), MATH 2520 (C or higher) or concurrent registration, or consent of instructor.

ENGR 2016 Steady-state Circuit Analysis

1 cr

This course introduces phasor- and frequency-domain techniques for steady-state circuit analysis. Topics include: complex numbers and phasors; complex power; an introduction to Fourier series; RLC circuits; and basic filters. Laboratory includes experiments with active audio filters.

ENGR 2096 Internship in Engineering

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Engineering and consent of instructor and the Center for Experiential

ENGR 2115 Introduction to Analog & Digital Electronics 5 cr

This course introduces techniques for transient and switching circuit analysis. Topics include: MOSFETs as amplifiers and switches; a continuation of Fourier series; Laplace transform and applications; transfer functions and frequency response; relationship between Fourier and Laplace techniques; complete response of active, first- and second-order filters. Laboratory includes experiments with active electronic filters. Lecture 4 hours; lab 2 hours.

Prerequisite: ENGR 2016 (C or higher), PHYS 1122 (C or higher), MATH 2520 (C or higher), and ENGC 1101 (C or higher), or instructor consent.

ENGR 2231 Thermodynamics

This course will cover the conservation of mass and energy and entropy balance; the properties, equations of state, and the processes and cycles for reversible and irreversible thermodynamic systems; and modes of energy transfer. Thermodynamic principles will be applied to modern engineering systems.

Prerequisite: CHEM 1061, PHYS 1121.

ENGR 2235 Statics

This course covers free-body diagrams and the principles of statics. Applications to simple trusses, frames, and machines are covered. Distributed loads and internal loads in beams are introduced.

Prerequisite: PHYS 1121 (C or higher) and MATH 1520 (C or higher).

ENGR 2236 Dynamics

This course covers the kinematics and kinetics of particles; Newton's laws; energy and momentum methods; systems of particles; kinematics and kinetics of rigid bodies in the plane; planar linkages; and mechanical vibrations. Prerequisite: ENGR 2235 (C or higher) and MATH 2520 (C or higher) or concurrent registration.

ENGR 2301 Introduction to Digital Logic Design A 2 cr

This is the first half of an introduction to digital logic design. It is recommended for mechanical, aerospace, computer, and electrical engineering students. Topics include Boolean algebra, logic gates, Karnaugh mapping, and analysis and design of combinational-logic circuits. This course meets the first half of the semester.

Prerequisite: MATH 1510 (C or higher) or concurrent registration.

ENGR 2302 Introduction to Digital Logic Design B 2 cr

This is the second half of an introduction to digital logic design. It is recommended for computer and electrical engineering students. Topics include: logic simplification, sequential logic, HDL modeling, and analysis and design of synchronous sequential logic circuits, VHDL modeling, and design of digital logic circuits. This course meets for the second half of the semester. Lecture 3 hours; lab 2 hours. Prerequisite: ENGR 2301 (C or higher).

ENGR 2331 Deformable Body Mechanics

This course is an introduction to the linear stress-strain behavior of engineering materials. Topics will include stresses due to uniaxial loading, bending and torsion, stress transformations, beam deflections, indeterminate structures, and column buckling.

Prerequisite: ENGR 2235 (C or higher), MATH 1520 (C or higher), MATH 2520 (C or higher) or concurrent registration

ENGR 2900 Topics in Engineering

1-4 cr

3 cr

3 cr

An examination of a special topic in engineering; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

ENGT-Engineering Technology

ENGT 1014 Safety

2 cr

2 cr

2 cr

This course is designed to align with the Manufacturing Skill Standards Council's (MSSC) assessment and certification system for Safety. The course curriculum is based on federally-endorsed national standards for production workers. This course will introduce OSHA standards relating to personal protective equipment, Hazard Communication, tool safety, confined spaces, electrical safety, emergency responses, lockout/tagout, and others.

ENGT 1018 Manufacturing Processes and Production

This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Manufacturing Processes and Production Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. This course emphasizes Just-In-Time (JIT) manufacturing principles, basic supply chain management, communication skills, and customer service.

ENGT 1022 Quality Practices & Measurement

This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Quality Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. Emphasis is on continuous improvement concepts and how they relate to a quality management system. Students will be introduced to a quality management system and its components. These include corrective actions, preventative actions, control of documents, control of quality records, internal auditing of processes, and control of non-conforming product.

ENGT 1026 Maintenance Awareness

2 cr

This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Maintenance Awareness Certification Assessment. The course curriculum is based upon federally endorsed national standards for production workers. This course introduces the concepts of Total Productive Maintenance (TPM) and preventative maintenance. Students are introduced to lubrication, electricity, hydraulics, pneumatics, and power transmission systems.

This course is a hands-on engineering experience, intended for elementary education majors, which covers topics in science, engineering, and technology with an emphasis on understanding what engineers do and how they make a world of difference. Students will learn that with some creativity and knowledge of the engineering design process, everyone can engineer. Topics that may be covered include: weather, water, simple machines, sound, plants, energy, and electricity; with corresponding engineering fields of mechanical, environmental, industrial, acoustical, package, green, and electrical. The structure and philosophy of engineering curricular materials, engineering activities, and appropriate instructional strategies will be emphasized in this course. Students will be prepared to deliver the Minnesota engineering standards in elementary math and science classes. Prerequisite: Minimum of 6 credits in both college-level math and science or instructor approval.

ENGT 1153 AC/DC Circuits

4 cr

A survey course designed to give understanding to the relationships of work, power, energy, and electrical charge as well as to the relationships of voltage, resistance, current, and capacitance. A laboratory experience includes analyzing basic series, parallel AC and DC circuits; identification and application of electronic components; gaining competence using electronic measuring instruments.

Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500.

ENGT 1180 Manufacturing Processes

2 cr

Manufacturing processes are technology-based operations which realize the transformation of various raw input materials into a physical product. This course provides an overview of the types of materials used to create products and the basic manufacturing processes involved in manipulating those materials. Other critical functions performed in a manufacturing environment will be discussed such as statistical process control, transportation, and packaging.

Prerequisite: MATH 0700 or concurrent registration or eligible for MATH 1100 and eligible for ENGC 1101 and eligible for READ 1106.

ENGT 1184 Fluid Mechanics

3 cr

This course addresses fundamental concepts in fluid mechanics and introduces algebraic-based methods for modeling the behavior of fluids under static and dynamic conditions. Applications of hydraulic and pneumatic systems illustrate the significance of fluid power technology integration in support of various engineering systems. Laboratory activities examine physical characteristics and properties of fluid systems, fluid flow, fluid power, energy storage in fluid systems and behavior of pneumatic and hydraulic systems.

Prerequisite: MATH 1100 (C or higher) or eligible for MATH 1500.

ENGT 1290 Measurement and Process Control

2 cr

Industrial manufacturers apply a variety of statistical-based techniques to more effectively address the quality of product design and production outcomes. This course examines how manufacturers make decisions about what product and process data to collect and how they assess the adequacy of the measurement system. Students will set up and interpret histograms and process control charts to identify chance or assignable variation in a collected data set. Students will run a design of experiments study to determine the impact key design and process parameters have on system performance.

Prerequisite: Eligible for MATH 1100 and ENGC 1101 and READ 1106.

ENGT 1511 Introduction to Engineering Technology (PLTW™)

Introduction to Engineering Technology which is based on curriculum by Project Lead the Way (PLTW™) overviews the role of technology in society and provides an introduction to the use of certain engineering technologies. Course activities and projects include: creating simple control systems to experience fundamental concepts in automation and robotics; documenting simple engineering design and assembly concepts and creating rapid prototypes through the use of computer-aided-design (CAD) 3-D modeling software; and completing a focused research project related to the role of technology in society.

ENGT 1512 Principles of Engineering (PLTW™) 3 cr

Prerequisite: Eligible for MATH 1100 and ENGC 1101.

Principles of Engineering, which is based on curriculum developed by Project Lead the Way (PLTW) introduces several core engineering technology topics: the engineering design process; engineering foundation concepts in mechanics, thermodynamics, fluid systems, electrical systems, control systems; statics, strength of materials and material testing; and dynamics/kinematics. Students complete a variety of activities and projects to learn how engineers and technicians use math, science, and technology in the engineering problem-solving process.

Prerequisite: ENGT 1511 or concurrent registration, MATH 1100 or concurrent registration, and eligible for ENGC 1101.

ENGT 1513 Digital Electronics Technology (PLTW™) 3 cr

Digital Electronics which is based on curriculum developed by Project Lead the Way (PLTW) is an introduction to several foundation concepts in digital electronics design. Students complete a variety of activities and projects to discover how engineers and technicians use mathematics, science, and technology in an engineering problem-solving process to create and evaluate solutions for specified tasks.

Prerequisite: ENGT 1511, ENGT 1153 and eligible for ENGC 1101.

ENGT 1514 Computer Integrated Manufacturing (PLTW) 3 cr

Computer Integrated Manufacturing builds on computer solid modeling skills developed in Introduction to Engineering Design (ENGT 1511), a Project Lead the Way (PLTW) course taught in high schools. Students use Computer Numerical Control (CNC) equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included. Prerequisite: ENGT 1511, eligible for MATH 1100 and ENGC 1101 or READ 1106.

ENGT 1516 Biotechnical Engineering

Introduction to the diverse fields of bio-chemistry, bioengineering, and bio-medical device engineering through the integrated application of biology, physics, technology, and mathematics. Students complete projects related to the following topics: DNA modeling, pathogen identification, forensic science, bioreactions and bio-processing, orthopedics and cardiovascular devices. Lecture 2 hours; lab 2 hours.

Prerequisite: Eligible for MATH 1100 or high school Algebra 2 (B or higher), and eligible for ENGC 1101 or READ 1106.

ENGT 2188 Electronics and Automation 4 c

This course provides an introduction to automation with a focus on the operation, maintenance, and troubleshooting of automated systems in industrial settings. An understanding of the essential mechanical, electrical, and software sub-system technologies integrated as a fully functional automated system is developed. A short unit on electronics provides foundation for learning the digital-based communication interfaces. The function of sensors, actuators, and controllers is addressed. Project work will provide hands-on opportunities to experience the characteristics and behaviors of automated systems. Prerequisite: ENGC 1101, ENGT 1153.

ENGW-Creative Writing

ENGW 1111 Introduction to Creative Writing

3 c

Students will study and write imaginatively in a variety of genres—play and screen writing, short fiction, poetry, and creative nonfiction as selected by the instructor. Students will also read and respond to imaginative writing and to student work in progress.

Prerequisite: ENGC 1101 Recommended: ENGC 1101 (C or higher).

MnTC Goals: 6.

ENGW 1900 Topics in Creative Writing

3 cr

Examination of a special topic or field in creative writing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

ENGW 2096 Internship in Creative Writing

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in creative writing and consent of instructor and the Center for Experiential Education.

ENGW 2112 Poetry Writing

3 cr

This course focuses on the writing and study of contemporary poetry. Students will compose original poetry, respond to classmates, and be introduced to form and technique in poetry

Prerequisite: ENGC 1101 Recommended: ENGW 1111 and ENGL 1186.

MnTC Goals: 6.

3 cr

ENGW 2113 Fiction Writing

3 cr

This course focuses on the writing and study of contemporary fiction. Students will compose original fiction, respond to classmates, and be introduced to form and technique in fiction.

Prerequisite: ENGC 1101 Recommended: ENGW 1111, ENGL 1188 and ENGL 1150.

MnTC Goals: 6.

ENGW 2114 Play and Screen Writing

3 cr

This course focuses on the writing and study of contemporary drama. Students will compose original plays and/or screenplays, respond to classmates, and be introduced to form and technique in drama.

Prerequisite: ENGC 1101 Recommended: ENGW 1111 and

ENGL 1187. MnTC Goals: 6.

ENGW 2115 Memoir/Non-Fiction Writing

This course focuses on the writing and study of contemporary creative nonfiction, including the sub-genres of memoir and the critical essay. Students will compose original essays, respond to classmates, and be introduced to form and technique in creative nonfiction.

Prerequisite: ENGC 1101 Recommended: ENGW 1111. MnTC Goals: 6.

ENGW 2800 AFA Capstone

3 cr

3 cr

The Capstone course fulfills the Capstone requirement for the AFA in Creative Writing. In the course, students complete individualized creative writing projects, which may include fiction, drama, poetry, or creative nonfiction pieces, internships, or service learning projects. Prerequisite: Acceptance into the AFA in Creative Writing program and successful completion of four required courses for the AFA in Creative Writing.

ENGW 2900 Topics in Creative Writing

3 cr

Examination of a special topic or field in creative writing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

EXSC-Exercise Science

EXSC 1000 Aspects of Fitness

1 cr

Provides students the fundamental components and concepts of physical fitness and health. Students will also learn strategies to help them begin, design, and maintain an exercise program to keep them fit for life. This is not an activity course. This course will be designed strictly for students who are enrolled in the Online AA degree program.

EXSC 1102 Badminton

1 cr

Course includes movement skills and techniques of badminton strokes. Positioning, strategies, and rules for singles and doubles play. A lifetime fitness activity.

EXSC 1103 Bowling

1 cr

Develop bowling proficiency through mental concentration, physical skill practice, and knowledge of rules and techniques. Approach and delivery styles as well as scoring. A lifetime fitness activity. Additional fee for this course.

EXSC 1104 Boot Camp I

1 cr

This course includes training principles and suggested programs and work outs for a boot camp style workout. It also includes techniques to improve and progress to a higher level of aerobic capacity, as well as focus on the benefits of strength and flexibility programs related to fitness. Speed, agility, and plyometrics will also be utilized to a certain extent.

EXSC 1105 Fitness Yoga

1 cr

Students will learn safe and effective fitness yoga maneuvers and how to apply them to a physically challenging workout. This course is designed to increase muscle strength and endurance along with flexibility.

EXSC 1107 Golf

1 cr

This course includes the fundamentals of golf strokes for woods, irons, and putters as well as club and shot selection, history, course etiquette, and rules of the game. A lifetime fitness activity. Additional fee for this course.

EXSC 1109 Karate

1 cr

A complete Tae Kwon Do fundamentals course designed for all levels of physical ability. Included are stances, punching, blocking, kicking, self-defense, hyung (kata - patterns,) and self-discipline. Tae Kwon Do is a lifetime choice for genuine martial arts skills, fitness, confidence, and accomplishment. Uniforms are required.

EXSC 1112 Tennis

1 cr

Includes movement skills and techniques of basic tennis strokes. Positioning and strategies for singles and doubles play; rules and etiquette. A lifetime fitness activity.

EXSC 1116 Volleyball

1 cr

Offensive and defensive skills of the game as well as strategy and rules. Designed to help beginning and intermediate players learn and appreciate the physical as well as mental aspects of the game. A lifetime fitness activity.

EXSC 1118 Soccer

1 cr

Includes offensive and defensive skills of the game as well as strategy and rules. Designed to help beginning and intermediate players learn and appreciate the physical as well as mental aspects of the game. A lifetime fitness activity.

EXSC 1122 Zumba

1 cr

Zumba is the latest fitness trend that is a Latin-inspired dance-fitness class. It offers great cardiovascular benefits, burns calories, and tones muscles in a party-like atmosphere. The cardio-based dance moves are easy to follow and very effective. It is a non-intimidating opportunity for non-dancers, dancers, fit, and unfit to participate in an exciting and energetic fitness class.

EXSC 1128 Team Sports and Exercise

3 cr

This course provides students with valuable fitness, wellness, and exercise information through lectures, assignments, and labs. Students will also engage in a variety of activities, exercise, and team sports throughout the semester for a complete wellness experience. Recommended: Eligible for READ 1106 and ENGC 0900.

EXSC 1129 Fitness for Life I

2 cr

Cardiovascular and strength enhancement through participation in an aerobic super circuit program. Selected strength training and cardiovascular equipment will be used. Assessment of current level of fitness helps students evaluate present status and set goals. Post test shows improvement and areas needing continued emphasis. Proper nutrition, weight management, and healthy lifestyle information is presented. Appropriate for all ages and fitness levels. Additional fee for this course. Recommended: Eligible for READ 0960.

EXSC 1130 Fitness Walking

1 cr

Students will learn how to implement healthy lifestyle choices using fitness and nutritional concepts. Course includes an emphasis on a fitness walking program to strengthen cardiovascular system and improve muscular strength and flexibility. A lifetime fitness activity.

EXSC 1133 Fencing

1 cr

Includes the various phases of the art of fencing, including history, etiquette, scoring, and officiating. Technique and skill development in position and mobility, simple attacks, defensive parries, and bouting.

EXSC 1151 Rock Climbing

2 cr

Climbing equipment, types of climbs, terminology, knots, anchors, belaying, free climbing, aid climbing, and rappelling. Individuals will assess their abilities and limitations as they relate to climbing activities. Strong emphasis on safety. Appropriate for beginners as well as experienced climbers. Additional fee for this course. Recommended: Eligible for ENGC 0900 and READ 0960.

EXSC 1153 Backpacking and Wilderness Preservation 3 cr Hiking equipment and clothing, minimum impact

techniques, fires, water treatment, food preparation, area and route selection, map use, injury prevention, and treatment. Strong emphasis on ecology, wildlife and environmental concerns, and preservation. A camping trip is required. Additional fee for this course.

EXSC 1200 Beginning Weight Training

1 cr

Provides basic weight training instruction, safe and effective equipment utilization, and basic program design techniques to reach personal strength goals. Students will create and participate in a personalized strength training program. Additional fee for this course.

EXSC 1400 Studio Cycling

1 cı

Involves continuous aerobic activity on studio cycling bikes. Students will learn proper body positions; participate in basic and rhythmic drills; power pacing workouts and safe cool-down techniques, with an emphasis on cardiorespiratory training improvements. Additional fee for this course.

EXSC 1500 Hiking

1 cr

Involves cardio-respiratory activity in a variety of outdoor settings within the metro area. Students will learn to select proper clothing, footwear, and snowshoe equipment; participate in outdoor training techniques; utilize map reading skills; practice minimum impact principles; recognize symptoms, treatment and prevention techniques for frost bite, hypothermia, dehydration, and heat exhaustion.

EXSC 1900 Topics in Exercise Science

1-4 cr

Skill development in various special areas of exercise science; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

EXSC 2096 Internship in Exercise Science

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Exercise Science and consent of instructor and the Center for Experiential Education.

EXSC 2253 Advanced Backpacking and Outdoor Leadership

2 cr

Provides an understanding of trip leadership in a wilderness backpacking setting. A review of backpacking skills including: equipment selection, food selection, cooking skills, and appropriate clothing selection will complement additional trip planning skills. Good judgment is the underlying educational objective of this course, which is measured by practical decision-making and problem-solving activities both in the classroom and during field experiences. Backpacking trip required. Additional fee for this course.

Prerequisite: EXSC 1153.

EXSC 2300 Introduction to Exercise Science

3 cr

An introduction to the science of human movement in a format of a lecture class. This course provides an overview of exercise physiology, sport and exercise psychology, biomechanics, motor behavior, sociocultural aspects of sport and exercise, sport nutrition, and other related topics. This course also provides information on the numerous areas of study and their applications within the field of kinesiology.

Recommended: Eligible for READ 1106 and ENGC 1101.

EXSC 2305 Exercise Physiology

3 cr

A lecture-based course designed to study the body's physiological responses from the cellular to organ system level to acute and chronic exercise. Emphasis on the physiological effects of muscular exercise, physical conditioning and sport-specific training. Provides the student with an opportunity to study how physiological responses to exercise are related to health, exercise performance, and personal training concerns.

Recommended: Eligible for READ 1106 and ENGC 1101.

EXSC 2310 Foundations of Personal Training

3 cr

A comprehensive course to familiarize students with all aspects of personal training through the developmental curriculum designed by an accredited, nationally-recognized organization. This class is a preparatory course for becoming a Nationally-Certified Personal Trainer. Recommended: Eligible for READ 1106.

EXSC 2315 Exercise Prescription

3 cr

Policies, procedures, and physiological basis for exercise testing and exercise prescription, as applied to apparently healthy and special populations. Students will gain practical fitness test administration experience and utilize data to create safe and effective exercise programs. Prerequisite: EXSC 2310 or concurrent registration.

EXSC 2330 Applications of Personal Training 2 cr

This course will expose students to the practical application and responsibilities of personal training. Students will perform assessments on individuals for fitness programs, prepare and execute fitness programs, adapt and adjust fitness program specifics to meet the changing fitness and health needs of the client.

Prerequisite: EXSC 2300 and EXSC 2305 and EXSC 2310 (or concurrent registration). Recommended eligible for READ 1106 and ENGC 1101.

EXSC 2900 Topics in Exercise Science

1-4 cr

Skill development in various special areas of exercise science; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

FREN-French

FREN 1100 Beginning French 1

5 ci

In this course students develop competencies in speaking, listening, reading, and writing in French. Verb forms studied include the present and compound past tenses of regular and irregular verbs. Culture is an integral part of the course and is incorporated through the analysis of film, music, traditions, and daily life in the francophone world. MnTC Goals: 8.

FREN 1101 Introduction to Interpreting and Translation 2 cr Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and

professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English.

Cross-Listed as: CHIN 1101, INDS 1101, GERM 1101, JAPN 1101, SPAN 1101.

FREN 1111 French Culture and Civilization

3 cr

This course acquaints students with aspects of the culture and civilization of French-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of French-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

FREN 1200 Beginning French 2

5 cr

This course is a continuation of the listening, reading, speaking, and writing competencies developed in FREN 1100. Verb forms studied include the imperfect, future, and conditional tenses. Students further explore cultural differences helping them develop a deeper understanding of the francophone world and a greater cultural perspective.

Recommended: FREN 1100.

MnTC Goals: 8.

FREN 2096 Internship in French

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in French and consent of instructor and the Center for Experiential Education.

FREN 2100 Intermediate French 1

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture and literature of French-speaking peoples and to create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes regular and irregular present tense, compound past and imperfect forms. Cultural topics include immigration and changing French identity. The course has an important online component and relies on the use of short films to introduce cultural and grammatical topics.

Recommended: FREN 1200.

MnTC Goals: 6, 8.

FREN 2200 Intermediate French 2

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture. and literature of French-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the subjunctive, future, conditional verb forms. The course has an important online component and relies on the use of short films to introduce cultural and grammatical topics.

Recommended: FREN 2100.

MnTC Goals: 6, 8.

FREN 2210 Advanced Communication Skills

3 cr

2-4 cr

5 cr

5 cr

Students continue the development and strengthening of oral and written proficiency acquired in previous courses. This course is strongly recommended for those students who have taken two years of language at the community college level or who have acquired knowledge through other coursework. Oral and written assignments may be based on cultural and/or literary materials presented in class.

FSCI-Food Science

FSCI 2096 Internship in Food Science

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Food Science and consent of instructor and the Center for Experiential Education.

FSCI 2100 **Introduction to Food Science**

3 cr

Introduction to the composition and the chemical and physical properties of foods, and the interaction, reaction, and evaluation of foods due to formulation, processing, and preparation.

Prerequisite: CHEM 1062 or HLTH 1107.

GEOG-Geography

GEOG 1050 Introduction to Maps and Places

GEOG 1101 Earth's Natural Environments

3 cr

An introduction to geography including study of the location and significance of important cultural and physical features of the earth, along with basic principles of map communication including: projection, scale, and symbolization. Includes principles of topographic and thematic mapping. MnTC Goals: 5, 8.

4 cr

This course in physical geography studies the earth's physical environment, its systems, and the physical processes that drive them. Interactions of the atmosphere, hydrosphere, lithosphere, and biosphere with human activity. Laboratory assignments provide application of concepts. Lecture 3 hours per week; lab 2 hours per week. MnTC Goals: 3, 10.

GEOG 1102 Human Geography

3 cr

3 cr

Human populations, their cultures and their landscapes, emphasizing cultural diversity, and interaction with the physical environment.

MnTC Goals: 5, 8.

GEOG 1104 Resources, Society and Environment

Human-environmental interactions: Physical, economic, social and political processes, and perspectives related to global natural resource use, and issues of sustainability and global change.

MnTC Goals: 5, 10.

GEOG 1121 World Regional Geography

3 cr

A survey of world issues and controversies at the regional and global scale; emphasizing the global economy, geopolitical issues, and environmental change. MnTC Goals: 5, 8.

GEOG 1123 **Geography of Minnesota**

This course examines Minnesota's natural environment and the way of life of the state's people, with a focus on the relationship between human activities and the environment.

MnTC Goals: 5, 10.

GEOG 1124 Geography of Latin America

3 cr

Learn how environments, cultures, politics, and economies produce dynamic human landscapes from the Rio Grande to Tierra del Fuego.

MnTC Goals: 5, 8.

GEOG 1125 Geography of the United States and Canada 3 cr

Analysis of people and environments of the United States and Canada with special emphasis on human diversity and environmental and resource problems.

MnTC Goals: 7, 10.

GEOG 1130 Climate Change: Science, Human Impacts and Adaptations

This course investigates the evidence for past and present climate change and what this implies for the future. At the end of this course, students will understand key principles of climate science, as well as identify and address human impacts and misconceptions. Students should also be able to contribute meaningfully to conversations about climate change and peoples' responsibility for ensuring a global future.

Cross-Listed as: GEOL 1130.

MnTC Goals: 3. 8.

GEOG 1170 Cities 3 cr

An examination of cities as social, political, and economic landscapes; emphasizing relationships and interactions among diverse people and places at neighborhood, metropolitan, and regional scales of analysis.

MnTC Goals: 7, 9.

GEOG 1172 Introductory Meteorology 4 cr

An examination of atmospheric structure and processes including: temperature patterns, heating and cooling of the earth, moisture and humidity, winds, weather map interpretation, and the role of humans in atmospheric modification. Laboratory assignments provide applications of these concepts. Lecture 3 hours; lab 2 hours. MnTC Goals: 3, 10.

GEOG 1180 Cartography and Geographic Information Systems

3 cr

This course is an introduction to cartographic and spatial analytical computer applications in geography and many other academic disciplines. This is a software-oriented course in which students learn the latest techniques in cartography and geographic information systems (GIS) to design many types of graphs and maps, in color and black and white formats. Knowledge of computer techniques for geographic representation is a required component for professional degrees in geography, geology, sociology, ecology, and many other academic disciplines.

GEOG 1900 Topics in Geography

1-4 cr

An examination of a special topic in geography; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

GEOG 2096 Internship in Geography

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Geography and consent of instructor and the Center for Experiential Education.

GEOG 2900 Topics in Geography

1-4 cr

An examination of a special topic in geography; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

GEOL-Geology

GEOL 1050 Earth History

4 c

This course provides interpretations of the evolution of our planet and its natural systems, including the scientific basis of these interpretations as well as the controversies faced as these developing interpretations have challenged existing social and religious standards. The interplay of scientific advancement and societal norms are probed in order to appreciate the broader context of our understanding of Earth's evolution. Lab activities demonstrate current application of the scientific method to questions of Earth's history. Lecture 3 hours; lab 2 hours. Prerequisite: Eligible for READ 1106.

MnTC Goals: 3, 9.

GEOL 1101 The Dynamic Earth

This course is an introduction to materials and structure of the earth and processes acting internally and externally to change it. It includes identification of common rocks and minerals, as well as other laboratory activities. Lecture 3 hours per week; lab 2 hours per week.

MnTC Goals: 3, 10.

GEOL 1110 Environmental Geology

3 cr

The relationship between people and the natural environment (particularly the geological components of that environment) and includes three general topics: resource distribution (minerals and energy resources), utilization, natural hazards (volcanoes, earthquakes, floods) and their effects on human activity, human impacts on the natural environment (waste disposal). This course includes a lab-like experience.

MnTC Goals: 3, 10.

GEOL 1111 Environmental Geology Laboratory

1 cr

This class is an optional "add-on" lab for Environmental Geology (GEOL 1110); only for students who are concurrently or previously enrolled in GEOL 1110 and wish to have GEOL 1110 count for a Goal 3 laboratory science requirement.

Prerequisite: GEOL 1110 or concurrent registration.

MnTC Goals: 3, 10.

GEOL 1120 Oceanography

3 cr

Relationship between the physical, chemical, and biological characteristics of oceans focusing on evolution of the oceans, biotic environments, dynamics of water movement, and the effect ocean processes have on humankind. This course includes a lab-like experience.

MnTC Goals: 3, 10.

GEOL 1130 Climate Change: Science, Human Impacts and Adaptations 3 cr

This course investigates the evidence for past and present climate change and what this implies for the future. At the end of this course, students will understand key principles of climate science, as well as identify and address human impacts and misconceptions. Students should also be able to contribute meaningfully to conversations about climate change and peoples' responsibility for ensuring a global future.

Cross-Listed as: GEOG 1130.

MnTC Goals: 3, 8.

GEOL 1900 Topics in Geology

1-4 ci

Examination of a special topic in geology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

GEOL 2096 Internship in Geology

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Geology and consent of instructor and the Center for Experiential Education.

GEOL 2900 Topics in Geology

1-4 cr

Examination of a special topic in geology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

GERM-German

GERM 1100 Beginning German 1

5 cr

This course introduces critical differences and similarities between German and English while students develop competency in speaking, listening, reading, and writing. Aspects of German culture are also frequently introduced in class, which help students acquire cultural sensitivity toward the German-speaking world as part of increased global understanding.

MnTC Goals: 8.

GERM 1101 Introduction to Interpreting and Translation

2 cr

3 cr

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, FREN 1101, INDS 1101, JAPN

GERM 1111 German Culture and Civilization

This course acquaints students with aspects of the culture and civilization of the German-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of German-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

1101, SPAN 1101.

GERM 1200 Beginning German 2

This course is a continuation of the listening, reading, speaking, and writing competencies developed in GERM 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective.

Recommended: GERM 1100.

MnTC Goals: 8.

GERM 2096 Internship in German

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in German and consent of instructor and the Center for Experiential Education.

GERM 2100 Intermediate German 1

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of German-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities.

Recommended: GERM 1200.

MnTC Goals: 6, 8.

GERM 2200 Intermediate German 2

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of German-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities.

Recommended: GERM 2100.

MnTC Goals: 6, 8.

GERM 2210 Advanced Communication Skills

3 cr

Students continue the development and strengthening of oral and written proficiency acquired in previous courses. This course is strongly recommended for those students who have taken two years of language at the community college level, or who have acquired equivalent knowledge through other courses. Oral and written assignments may be based on cultural and/or literary materials presented in class.

HCCC-Health Care Core Curriculum

HCCC 1000 Health Career Exploration

0 cr

1 cr

This module provides information about the different types of healthcare workers in various healthcare settings. Included are education and licensure/certification requirements, scope of work, types of interaction with clients, peer groups and team members, and the impact healthcare workers have meeting the healthcare needs of clients. Also included is information about selecting, entering, and advancing in a healthcare career.

HCCC 1010 Behaviors for Success in Healthcare Settings .5 cr

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, approaches needed to assist clients, 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 life to maintain personal wellness.

HCCC 1020 Communications in Healthcare Settings

This module emphasizes the importance of effective communication between and among healthcare workers and their clients. Included are verbal and non-verbal 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.

HCCC 1030 Awareness and Sensitivity to Client Needs .5 cr

This module presents challenges and issues related to the awareness and sensitivity needed to understand the healthcare needs of clients. 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 clients and their families.

HCCC 1040 Respecting Client and Staff Diversity .5 cr

This module provides a framework for dealing with diverse clients and staff. Included are belief systems, cultural practices and respect, and sensitivity to cultural and gender issues. Awareness and use of effective strategies to appropriately deal with client and staff diversity are emphasized.

HCCC 1050 **Healthcare Safety and Standard Precautions**

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 safety, and procedures to respond to emergencies.

HCCC 1060 Legal Issues in Healthcare

This module focuses on the legal issues related to clients and healthcare workers. Areas such 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 have on healthcare systems.

HCCC 1070 Healthcare Ethics

This module emphasizes the use of sound ethical practices in healthcare. Included are ethical practices 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.

HCCC 1074 Healthcare Core Total Curriculum

The Healthcare Core Curriculum was originally designed as a flexible, modular based curriculum that could be adapted to a variety of applications in work force development centers, high schools, colleges, and to meet specific workplace training needs. This course combines all of the modules of the Healthcare Core Curriculum theory content under one unified course identification to be used when all modules will be taught.

HCCC 1080 **Nursing Assistant Skill Set** 2 cr

This course is an introduction to basic nursing care skills and concepts necessary to prepare the student to be employed in a healthcare facility under direct supervision of a licensed nurse. Completion of this course will prepare the student to certify as a nursing assistant with the State

Prerequisite: Prerequisites: HCCC 1000, HCCC 1010, HCCC 1020, HCCC 1030, HCCC 1040, HCCC 1050, HCCC 1060 and HCCC 1070.

HCST-Health Care Systems Technology

HCST 2096 Professional Practical Experience

experiences in an approved healthcare systems technology environment. Students are not placed in a work environment but are guided through the professional development process to gain the skills necessary to conduct workforce needs assessments, informational interview skills and questions, networking tips, and resume building tools which will be used to bridge the gap from graduation to the workforce.

Prerequisite: Prerequisites: Consent of program coordinator/chair and 30 credits completed in the program.

Designed to provide exploratory or specific work

HCST 2100 Introduction to Health Information Technology 4 cr

This course will develop an understanding of the role of Information Technology (IT) in the US healthcare system's drive to implement electronic health data exchange. It will provide students with an introduction to Health Information Technology (HIT), Electronic Health Records (EHR), and Health Information Exchange (HIE).

Prerequisite: HLTH 2010.

HCST 2200 Privacy and Security in Health Information Technology

This course will develop an understanding of the need for privacy and security in the health care industry. This course will emphasize government mandated privacy and security requirements, the importance of compliance, and ways to implement privacy and security during software development.

Prerequisite: HCST 2100.

HCST 2300 **Health Care Systems Technology Capsone** 4 cr

Designed to provide an opportunity to individually design and self-direct, with guidance from the assigned faculty, a course capstone project. The capstone course project involves identifying students' strengths and interests within the fields of study and workforce they are interested in exploring.

Prerequisite: HCST 2100.

HIST-History

History of World Civilizations 1 HIST 1101

2 cr

The history of world civilizations from the ancient world to 1300 C.E. (Common Era), including: Western Asia and Egypt, Greco-Roman world, India, China, Japan, Southeast Asia, Africa, medieval Europe, Islamic world, and The Americas before Columbus' arrival. Thematically, the course begins from the earliest civilizations to the end of the conflict between Christians and Muslims known as the Crusades.

MnTC Goals: 5, 8.

.5 cr

.5 cr

HIST 1102 **History of World Civilizations 2**

4 cr

The history of world civilizations from 1300 C.E. (Common Era) to no later than 1 January, 2020. Topics will include colonialism and resistance to it, the age of revolutions, industrialization and its effects on people living in both imperialist and colonized societies, and the connection between industrialization and imperialism as causes of World War I, the rise of national liberation movements, decolonization, total war, holocausts, globalization, the Cold War, fundamentalism, late-capitalism and its cultures, and the rise of digital global technologies.

MnTC Goals: 5, 8.

United States History 1 HIST 1111

4 cr

The Age of Exploration, Colonial America, Revolutionary Era, The Early National Period, Reform and Expansion, the road to the Civil War, Civil War, and Reconstruction. MnTC Goals: 5. 7.

HIST 1112 **United States History 2**

4 cr

The Civil War and Reconstruction, the New South and the New West, Industrialization, Populism and Progressivism, World War I, the Great Depression and the New Deal, World War II, Cold War America, and beyond.

MnTC Goals: 5. 7.

HIST 1131 Family: Sex/Gender/Power: Cross-Cultural, Historical Perspective 3 cr

A social history of the family. The course examines how social, political, economic, religious, and cultural changes have influenced the structure, function, and values of family. A comparative study of the American family will be made with other cultures.

MnTC Goals: 5, 8.

HIST 1133 **Minnesota History**

3 cr

This course focuses on the interrelationship between Minnesota's geophysical environment and socio-cultural development. Topics will include Native American culture, European settlement, immigration, economic and industrial development, political institutions, cultural legacy, ethnic heritage, and Minnesota's place in the global community. MnTC Goals: 5, 10.

HIST 1900 Topics in History

1-3 cr

A one-semester special topics course in which students may engage in a study of a subject not regularly offered in the history program, or for international educational experience. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

HIST 2096 Internship in History

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in History and consent of instructor and the Center for Experiential Education.

HIST 2101 History of East Asia

3 cr

The course will present East Asian history with a comparative emphasis focusing on the social, cultural, and political development of the region. Topics will include: the creation and decline of early empires, diffusion of Confucian ideology, diffusion of Buddhism, resistance to Chinese expansion, Western imperialism, the rise of Asian nationalism, social revolution, modernization and nationalism, and East Asian expansion in the 21st century. Prerequisite: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 5, 8.

HIST 2102 **Latin American History Pre-Conquest to** the Present

3 cr

This course will present a history of Latin America beginning with the Native American peoples prior to European conquest and concluding with contemporary history. Course topics will include: pre-Columbian Native American empires; European conquest and Native American resistance during the 16th - 19th centuries: history of disease and its impact on historical events; Latin American independence movements; industrialization and neo-colonialism; continuing tensions and conflict between indigenous people and ladino elite; transition to modern Latin American states.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 8.

HIST 2111 Lesbian, Gay, Bisexual, and Transgender **U.S. History**

Students deepen their understanding of the experiences of lesbian, gay, bisexual and transgender people in U.S. society and the historical roots within the United States of those who experience same-sex attraction and those who identify outside expectations for their perceived gender, understood now as lesbian, gay, bisexual and transgender. Students trace roots from the colonial era, when behavior rather than identity formed the common understanding of sexuality, through the 19th century when the concepts of hetero- and homosexuality were developed, into the 20th and 21st centuries, when a focus on particular social identities became a salient feature of U.S. society. Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 7.

HIST 2201 The World in the Era of the World Wars 3 cr

This course will present a history of the world in the first half of the twentieth century. Course topics will include: the world on the eve of the Great War; the origins of WWI; the Paris Peace Conference; the rise of totalitarian systems such as Communism, Fascism and Nazism; the origins of WWII; the war in Europe; the Holocaust; the war in the Pacific; strategic bombing; the decision to use atomic weapons against Japan; war crimes trials; war's aftermath and legacy.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 8.

HIST 2900 Topics in History

A one-semester special topics course in which students may engage in a study of a subject not regularly offered in the history program, or for international educational experience; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

HLTH-Health

HLTH 1010 Medical Terminology

Comprehensive course designed for mastering the medical language used in all professions and industries related to health care. Course includes an introduction of body systems in relation to medical terminology. Utilization, understanding and pronunciation of medical terms are incorporated into this course.

HLTH 1103 College First Aid and Adult CPR

This course provides a basic understanding of first aid, AED, and adult CPR principles, and covers fundamental skills necessary to sustain a life until Emergency Medical Services arrive at the scene. Students have the opportunity to earn CPR certification from the American Heart Association.

HLTH 1104 Personal and Community Health 3 cr

This course examines current health issues affecting the individual and community such as disease prevention, stress, nutrition, fitness, mental health, sexuality, and aging. Emphasis is placed on developing critical thinking skills to assist the student in creating a holistic plan for optimal personal and community health.

HLTH 1106 Drug Use and Abuse

3 cr

1-3 cr

3 cr

2 cr

This course will examine the impact of mood-altering substances on the individual, family, and society. This includes an exploration of the interrelatedness of personal decisions regarding the use/non-use of mood-altering substances on politics, economics, and the various sociocultural institutions.

HLTH 1107 Principles of Nutrition

3 cr

Emphasis on physiological function of nutrients in the human body, including digestion, absorption, and metabolism. Basic principles of nutrition are used to demonstrate and evaluate disease preventing diets that are determined by scientific criteria. Application of nutrition theories are illustrated by an in-depth dietary analysis utilizing databases, calculations, and scientific inquiry. Taught by registered dietitians.

Recommended: Eligible for READ 1106.

HLTH 1112 CPR for the Professional Rescuer

1 cr

This course is designed to teach the skills of CPR for victims of all ages, including ventilation with a barrier device, a bag-mask device, and oxygen, use of an automated external defibrillator (AED), and relief of foreign-body airway obstruction (FBAO). It is intended for participants who provide healthcare to patients in a wide variety of settings, including in-hospital and out-of-hospital. Meets admission requirements for the Dental Hygiene and Nursing programs at Normandale. This course provides an opportunity to earn the American Heart Association Basic Life Support (BLS) Certification.

HLTH 1118 Stress Management

3 c

2 cr

An exploration and celebration of the adaptive ability of human beings to create and overcome stress in our urban and technological society. This course uses a holistic approach in assisting the student to recognize personal stress levels, to develop strategies for managing stress, and to understand the relationships between complex cultural forces and personal responsibility in the 21st century.

HLTH 1160 Theory and Practice of T'ai Chi Ch'uan 1

Introduces the theory, applications, and postures of T'ai Chi. Emphasis is on incorporating the balance, flexibility, relaxation, and muscular strengthening concepts of T'ai Chi into a lifestyle which benefits body, mind, and spirit.

HLTH 1170 Introduction and Exploration into Integrative/Holistic Health Modalities 3 cr

This course is an overview of the theories and practice of integrative/Holistic health modalities including Qigong. Students will study theories, examine various integrative/holistic health and qigong practices, learn experientially how to influence their own energy, as well as how to facilitate self-discovery within others. This course is an exploratory class for students who want to continue their education in holistic health or have already taken Stress Management.

HLTH 1900 Topics in Health

1-4 cr

Skill development in various special areas of health; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

HLTH 2010 Healthcare in the US

3 cr

Students will understand the history, organization, influences, and delivery of healthcare in the US and abroad. A focus will be on analyzing the factors that have shaped our healthcare system compared to the other parts of the globe. The course will cover types of healthcare institutions, functions of hospitals, and other facilities; accountability in healthcare, hierarchy of the healthcare system, organizational structure, and the role of government in healthcare.

Recommended: Eligible for ENGC 1101 and READ 1106.

HLTH 2011 Introduction to Public Health

3 cr

A foundation course that introduces students to the concept, history, and practice of public health. The course examines the environmental, social, political, and behavioral determinants of health and disease from a population perspective. It also looks at options for intervening to maintain the public's health with the help of healthcare, public health, environmental health, and safety systems as well as laws and taxation. Emphasis is on developing critical thinking skills to assist the student in creating a holistic plan for optimal personal and community health.

HLTH 2012 Public Health Advocacy and Leadership

3 cr

This course analyzes the discipline and leadership in Public and Community Health Education. Students will explore and practice behavior change and leadership models, theories, ethical factors, advocacy, and outreach in health education.

HLTH 2096 Internship in Health

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Health and consent of instructor and the Center for Experiential Education.

HLTH 2105 Women's Health

3 cr

This course examines critical issues in women's health. Topics will include biological, cultural, global, psychological, historical, and political areas that shape and define women's health and healthcare choices. We will explore behaviors which promote or compromise women's health and the philosophy of an integrative approach to optimal health.

Recommended: Eligible for ENGC 1101 and READ 1106.

HLTH 2160 Theory and Practice of T'ai Chi Ch'uan 2 2 cr

This course is a continuation of HLTH 1160, Theory and Practice of T'ai Chi Ch'uan 1. It is designed for the student desiring to deepen his/her understanding and practice of T'ai Chi through additional readings and work with beginning students. In addition to further study of the subject matter from HLTH 1160, instruction in advanced standing forms; Qigong, push hands and other T'ai Chi forms will be taught. Each student will be assigned a small group of beginning students as part of the Service-Learning component of the class.

Prerequisite: HLTH 1160.

HLTH 2209 Emergency Medical Responder

3 cr

This course provides a more in-depth examination of the techniques and procedures necessary in handling the physical and emotional needs of the injured, or the suddenly taken ill person until more advanced medical help arrives. Legal and ethical issues, treatment for shock, respiratory and circulatory emergencies, spinal immobilization, fractures, special populations, poisoning, temperature emergencies, childbirth, and rescue skills. A Minnesota EMS Regulatory Board approved Emergency Medical Responder certificate is available upon successful completion of course objectives.

HLTH 2900 Topics in Health

1-4 cr

Skill development in various special areas of health; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

HSER-Health and Human Services

HSER 1100 Current Issues in Health and Human Services 2 cr

This course is an overview of the Health and Human Services field. Topics discussed include the history of human/social services/public health in the United States and globally. Topics include poverty, barriers to service, social policy, public health, welfare systems, and future trends in the field.

HSER 1200 Multicultural Aspects in Health and Human Services 2 cr

In this course, students examine the multicultural models related to the health and human services field. Students explore their own cultural identities, values, and experiences and understand how they impact their professional role in Health and Human Services. The knowledge and skills health and human service workers need to possess in order to provide competent and ethical services for the clients and populations they serve are also examined.

HSMA-Hospitality Management

food service and restaurant entities.

HSMA 1103 Introduction to Hospitality and Tourism Management

This introductory course provides a portal to the dynamic field of hospitality, travel, and tourism industry. It provides students with a comprehensive overview of hospitality and tourism management including hotels, restaurants, food service, marketing, service companies, as well as the functional areas of hotel operations.

4 cr

HSMA 1143 Principles of Food Production and Sanitation 4 cr Students are given hands-on laboratory experiences in all major areas of food production. Lectures allow students to bridge the gap of food production with operating profitable

HSMA 1162 Hotel/Lodging Management and Operations 4 or This course examines the theoretical applications of all

revenue center operations including yield management and other vital hotel functions, with emphasis on the control function of management.

HSMA 1170 Introduction to Club Management 4 cr

Introduction to club management provides a unique perspective on all types of club management including spa, fitness, athletic and city; unique discussion and case study provide the student with the keys to successful leadership development complemented with relationship marketing skills, manufacturing successful club managers.

HSMA 1900 Topics in Hospitality Management

An examination of a special topic in hospitality management; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

HSMA 2096 Hospitality Management Internship

This internship course explores careers and training in a supervised work setting. Combines theory with field experience to gain a broader understanding of management as it relates to a specific hospitality segment. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester,

1-3 cr

2-4 cr

credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Hospitality

Management and consent of instructor and the Center for Experiential Education.

HSMA 2097 Senior Hospitality Internship

4 cr

This capstone course is designed to enable graduating students to strengthen their career planning and assessment skill sets learned from HSMA 2096 and thus solidify their career decisions in a certain hospitality specialization. It results in the student choosing a secured hospitality career which fits with their personal and professional aspirations.

Prerequisite: instructor's permission.

HSMA 2098 International Internship

4 cr

Allows students to explore the interrelationships between theory and practice of international hotel operations. Students apply key operation concepts, hospitality models and systems in an international setting. Prerequisite: instructor's permission.

HSMA 2100 Casino Management and Operations 4 cr

To develop a working understanding of the principles of casino management and operational procedures necessary for state, federal, and Native American compliance (regulations and legal issues).

HSMA 2125 Business Practices in the Global Market

Provides understanding and application into the complex global business arena. Global markets have created the need for companies to do business in every corner of the world. It is imperative that businesses conduct themselves in a professional, ethical, yet sensitive manner regarding regional customs, traditions, and religious practices. This course examines the need for professional business practices, ethics, protocol, etiquette, and professional and social behavior in all settings of business, national and international.

Prerequisite: At least one course in BUSN or HSMA.

HSMA 2144 Food/Beverage Management and Cost Control 4 cr A working understanding and application of the principles of food, beverage, labor, cost control, and management functions.

HSMA 2150 Revenue Management in Hospitality and Tourism 4 cr

This course provides a foundation for managing revenues and costs in the hospitality and tourism industry. Students will learn the historical development of yield management (YM) and its formation into modern day revenue management (RM). The course will rely upon cases and articles to analyze trends and develop effective revenue management strategies in the accommodations, food and beverage, attractions and transportation sectors of the hospitality and tourism industry.

HSMA 2172 Hospitality Sales and Marketing Management 4 cr

Organization and functioning of marketing and sales department; the need for sales planning through analysis of product, competitors, and market. In addition to sales planning and analysis, students will work with industry experts selling the hospitality product.

Recommended: Computer skills and a strong interest in hotel management.

HSMA 2173 Convention and Meeting Planning Management 4 cr

An overview of successful convention and meeting planning management including all services, execution, and follow-up.

HSMA 2900 Topics in Hospitality Management 1-3 cr

An examination of a special topic in hospitality management; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

INDS-Interdisciplinary Studies

INDS 1101 Introduction to Interpreting and Translation

Introduction to Interpreting and Translation (INDS 1101) introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions.

Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101,

JAPN 1101, SPAN 1101.

INDS 1600 Leadership Development Studies

3 cr

This honors-level course will provide a basic understanding of the concept of leadership and foster the development of leadership skills. This is a humanities-based course which integrates classical and contemporary readings, as well as relevant films. The eleven-unit curriculum has been developed through a Kellogg Foundation Leadership Grant as part of the Phi Theta Kappa Leadership Development Program and is used nationally in academic settings and the business world. The course begins with considering a personal leadership philosophy and proceeds through such areas as vision, goals, ethics, conflict management, team building, and leading by serving.

MnTC Goals: 9.

INDS 1900 Topics in Interdisciplinary Studies

Examination of a special topic in interdisciplinary studies. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

INDS 2500 Honors Capstone

3 cr

1-3 cr

In the Honors Capstone course, students will propose, develop, and complete a research project in their major or chosen discipline, and document and present their research to the college community.

Prerequisite: Admission into the Honors Program and successful completion of at least 9 honors credits.

INDS 2900 Topics in Interdisciplinary Studies 1-3 cr

Examination of a special topic in interdisciplinary studies. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

JAPN-Japanese

JAPN 1100 Beginning Japanese 1

This course introduces critical differences and similarities between Japanese and English while students develop competency in speaking, listening, reading, and writing. Aspects of Japanese culture are also frequently introduced in class, which help students develop cultural sensitivity toward the Japanese-speaking world as part of increased global understanding.

MnTC Goals: 8.

JAPN 1101 Introduction to Interpreting and Translation 2 cr Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required

to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101, INDS 1101, SPAN 1101.

JAPN 1111 Japanese Culture and Civilization 3 cr

This course acquaints students with aspects of the culture and civilization of the Japanese-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Japanese-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

JAPN 1200 Beginning Japanese 2

This course is a continuation of the listening, reading, speaking, and writing competencies developed in JAPN 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective.

Recommended: JAPN 1100.

MnTC Goals: 8.

JAPN 2096 Internship in Japanese

2-4 cr

5 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Japanese and consent of instructor and the Center for Experiential Education.

JAPN 2100 Intermediate Japanese 1

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Japanese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes a review of the forms, formation, and uses of the "ta" and "nai" forms. Recommended: JAPN 1200.

MnTC Goals: 6, 8.

JAPN 2200 Intermediate Japanese 2

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Japanese-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the forms called "plain forms" for complete phrases and sentences.

Recommended: JAPN 2100.

MnTC Goals: 6, 8.

MATH-Mathematics

MATH 0601 Pre-College Math 1

3 cr

MATH 0601 offers a complete review of pre-college level mathematics. Topics include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. The number of new topics that each student will study and the number of courses that each student will need in the MATH 0601, 0602, 0603 set will vary based on the results of their initial assessment and the sequence of mathematics courses that the student intends to pursue. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics in MATH 0601. Students completing MATH 0601 who have achieved eligibility for their intended sequence of math courses do not need MATH 0602 or MATH 0603, MATH 0601 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered

Prerequisite: Eligible for MATH 0601.

MATH 0602 Pre-College Math 2

MATH 0602 is a continuation of Pre-college Mathematics from MATH 0601 for students who have yet to master the learning objectives required for their intended sequence of math courses. Topics are the same as those listed for MATH 0601 which include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics. Students who achieve eligibility for their intended sequence of math courses after completing MATH 0602 do not need MATH 0603. MATH 0602 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered.

Prerequisite: MATH 0601.

MATH 0603 Pre-College Math 3

3 cr

MATH 0603 is a continuation of pre-college mathematics from MATH 0602 for students who have yet to master the learning objectives required for their intended sequence of math courses. Topics are the same as those listed for MATH 0601 and MATH 0602 which include linear equations and inequalities, graphs of linear equations, exponents and polynomials, linear, quadratic, exponential and logarithmic functions, problem solving and systems of equations, rational and radical expressions and equations. Eligibility for a subsequent mathematics course is determined by a specific level of mastery of the topics. MATH 0603 serves as a preparation for MATH 0630, 0700, 0990, 1020, 1050, 1080 or 1100 based on the number of learning objectives mastered

Prerequisite: MATH 0602.

MATH 0630 Survey of Algebra

3 cr

Topics include linear and quadratic equations, graphs of linear equations, exponents and polynomials, linear and quadratic functions, introduction to exponential and logarithmic functions.

Prerequisite: Eligible for MATH 0630.

MATH 0700 Intermediate Algebra

0 cr

Proficiency course for Pre-College Math topics. Students cannot register for this course. Students who successfully demonstrate mastery of the learning objectives for Intermediate Algebra in MATH 0601, MATH 0602, or MATH 0603 will be given a grade of P on their transcript for MATH 0700. The purpose of this course is to state for other programs and institutions that a student has mastered this level of mathematics material which is equivalent to eligibility for MATH 1100 (College Algebra). Prerequisite: MATH 0601, MATH 0602 or MATH 0603.

This course is the first in a two-semester sequence designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one year. The two-semester sequence is useful to students whose academic program is satisfied by an introductory statistics course. STATWAY Statistics 1 covers sampling methods, descriptive statistics, graphing methods, linear and exponential models, and an introduction to probability as well as necessary topics from beginning algebra. The curriculum is based on student collaborative group learning. Students must commit to completing MATH 0990 and MATH 1090 as a required sequence of courses: MATH 0990 in one semester and MATH 1090 in a subsequent semester. Prerequisite: Eligible for MATH 0990.

MATH 0995 Math Skills for Accelerated STATWAY

2 cr

This course is taught concurrently with MATH 1095 Statway Statistics Accelerated and is designed to support students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1095 (4 credits) and the co-requisite MATH 0995 (2) credits) are useful to students whose academic program is satisfied by an introductory statistics course, and MATH 0995 allows those students who are not eligible for MATH 1080 Statistics to complete a college-level statistics course in 1 semester. Math Skills for Accelerated Statway covers sampling methods; descriptive statistics; converting among fraction, decimal, and percent equivalencies; addition and subtraction of decimal numbers; rounding decimal numbers accurately; order and equivalence of rational numbers; understanding inequality symbols; understanding scientific notation; an introduction to probability; necessary topics from beginning algebra; and student success skills. The curriculum is based on student collaborative group learning. Students must complete MATH 0995 and MATH 1095 concurrently.

Prerequisite: Eligible for MATH 0990. Corequisite: MATH 1095.

MATH 1020 Math Trek: Mathematics for Liberal Arts 3 cr

The purpose of this introductory course is to develop an understanding of the nature of mathematics, and an awareness of its role in society. Through a selection of topics the course will develop problem-solving techniques, an appreciation for mathematics and the relationship of mathematics to other disciplines. Topics may include voting systems, financial mathematics, environmental mathematics, or logic and problem solving. This course is an alternative for students whose program does not require College Algebra (Math 1100) and it satisfies Goal 4.

Prerequisite: Eligible for MATH 1080 or MATH 0630 (C or higher) or the equivalent in MATH 0601, 0602, 0603. MnTC Goals: 4.

MATH 1055 Elements of Mathematics 1 4 cr

As part of a two-course sequence, this course focuses on counting and numbers, operations, fractions, decimals, ratio and proportion, number theory, and algebra. Emphasis on mathematical reasoning, estimation, and problem solving.

Prerequisite: Eligible for MATH 1080 or MATH 0630 with a grade of C or higher or the equivalent in MATH 0601, 0602, 0603.

MnTC Goals: 4.

MATH 1065 Elements of Mathematics 2 4 cr

As part of a two-course sequence, this course focuses on measurement, geometry, probability, data and statistics. Emphasis on mathematical reasoning, estimation, and problem solving.

Recommended: MATH 1055.

MnTC Goals: 4.

MATH 1080 Introduction to Statistics

4 cr

Concepts and application of descriptive and inferential statistics. Measures of central tendency and variation: z-scores and percentiles, normal distribution, and central limit theorem. Estimation, hypothesis testing, t and z tests, chi-square tests, analysis of variance (ANOVA), and linear regression.

Prerequisite: MATH 0630 or eligible for MATH 1080.

MnTC Goals: 4.

MATH 1090 STATWAY Statistics 2 4 cr

This course is the second in a two-semester sequence designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one year. The two-semester sequence is useful to students whose academic program is satisfied by an introductory statistics course. STATWAY Statistics 2 covers sampling distributions, Central Limit Theorems, confidence intervals, and hypothesis testing for population proportions, population means, and means of paired differences. Chi-square tests for one- and two-way tables and ANOVA methods are also covered, as well as necessary topics from beginning algebra. The curriculum is based on student collaborative group learning. Students must commit to completing MATH 0990 and MATH 1090 as a required sequence of courses: MATH 0990 in one semester and MATH 1090 in a subsequent semester.

Prerequisite: MATH 0990

MnTC Goals: 4.

MATH 1095 STATWAY Statistics: Accelerated

This course is an accelerated version of the Statway Statistics 1 and 2 sequence (MATH 0990 and 1090) and is taken simultaneously with the corequisite MATH 0995. Along with MATH 0995, it is designed to guide students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1095 (4 credits) and the corequisite MATH 0995 (2 credits) are useful to students whose academic program is satisfied by an introductory statistics course, and the corequisite course allows those students who do not place at the MATH 1080 eligibility level to complete a collegelevel statistics course in 1 semester. Statway Statistics: Accelerated covers sampling distributions, Central Limit Theorems, confidence intervals, and hypothesis testing for population proportions, population means, and means of paired differences. Chi-square tests for one and two-way tables are also covered, as well as necessary topics from beginning algebra. Students must complete MATH 0995 AND MATH 1095 in the same semester. MATH 1095 with MATH 0995 is equivalent to MATH 1090.

Prerequisite: Eligible for MATH 0990.

MnTC Goals: 4.

MATH 1100 College Algebra

4 cr

This is a college-level algebra course that emphasizes properties of functions and their graphs. Linear, quadratic, polynomial, rational, exponential and logarithmic functions are covered. Other topics include: solving equations and inequalities, and systems of equations and inequalities. This course also includes a basic introduction to right triangle trigonometry.

Prerequisite: MATH 0700 or eligible for MATH 1100.

MnTC Goals: 4.

MATH 1150 Trigonometry

4 cr

This course, together with MATH 1100, is intended to prepare students for a multiple-term calculus sequence. It includes a thorough treatment of trigonometric functions. Other topics include polar coordinates and equations, complex numbers, DeMoivre's Theorem, vectors and their applications, the conic sections, parametric equations, sequences, and series. You may not receive credit for both MATH 1150 and MATH 1500.

Prerequisite: MATH 1100 (C or higher).

MnTC Goals: 4.

MATH 1400 Survey of Calculus

4 cr

Concepts and techniques of differential and integral calculus for those who do not need the comprehensive calculus sequence (MATH 1510-1520). Principal applications from business, technology, social science, and statistics.

Prerequisite: MATH 1100 (C or higher) or eligible for MATH

1500.

MnTC Goals: 4.

MATH 1500 Pre-Calculus

This course is intended to prepare students for a multiple-term calculus sequence. This is an accelerated treatment of all elementary functions from MATH 1100, followed by a thorough treatment of trigonometric functions. Other topics include polar coordinates and equations, complex numbers, DeMoivre's Theorem, vectors and their applications, the conic sections, and parametric equations. You may not receive credit for both MATH 1500 and MATH 1150.

Prerequisite: MATH 1100 (C or higher) or eligible for MATH

1500.

MnTC Goals: 4.

MATH 1510 Calculus 1

5 cr

5 cr

Topics include functions, limits, derivatives, and an introduction to integration. Applications include but are not limited to science, engineering, economics, and ecology. Prerequisite: MATH 1150 (C or higher), MATH 1500 (C or higher) or eligible for MATH 1510.

MnTC Goals: 4.

MATH 1520 Calculus 2

5 cr

Continued development of the properties and applications of integration. Topics include infinite sequences and series, introduction to differential equations, calculus of polar coordinates, and parametric equations. Applications include but are not limited to science, engineering, economics, and ecology.

Prerequisite: MATH 1510 (C or higher).

MnTC Goals: 4.

MATH 1900 Topics in Mathematics

1-3 cr

4 cr

An examination of a special topic in mathematics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

MATH 2011 Discrete Structures of Computer Science

Concepts fundamental to the analysis of algorithms. Topics include logic, sets, methods of proof including mathematical induction, combinatorics, relations, solution of recurrence relations, graphs and trees.

Prerequisite: MATH 1510. Cross-Listed as: CSCI 2011.

MnTC Goals: 4.

MATH 2031 Introduction to Numerical Computing

4 cr

Explores various numerical methods for solving scientific and technical problems including Newton's method, numerical integration, and a variety of interactive methods.

Prerequisite: MATH 1520 and proficiency with C, C++, or Java. Cross-Listed as: CSCI 2031.

MATH 2033 Elementary Computational Linear Algebra 4 cr

Matrices and linear transformations, basic theory, linear vector spaces, inner product spaces. Systems of linear equations, Eigenvalues, and singular values. Algorithms and computational matrix methods using MATLAB. Use of matrix methods to solve a variety of computer science problems.

Prerequisite: MATH 1510. Cross-Listed as: CSCI 2033.

MATH 2080 Statistical Modeling

3 cr

This course provides an introduction to statistical model building including simple linear regression, non-linear models, logistic regression, and multiple regression models. Optionally, an instructor may include an introduction to artificial neural net models. Examples of modeling problems will be used for a variety of disciplines and thus the course should be useful to students interested in physical sciences, biology, economics, finance, and data science.

Prerequisite: MATH 1080 or MATH 1090.

MnTC Goals: 4.

MATH 2096 Internship in Mathematics

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Mathematics and consent of instructor and the Center for Experiential Education.

MATH 2400 Probability and Statistics with Calculus

4 cr

Descriptive statistics, elementary probability and probability distributions, sampling and the elements of statistical inference including point/interval estimation, and hypothesis tests.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

MATH 2510 Calculus 3: Multivariable Calculus

5 cr

Multivariable functions, three-dimensional analytic geometry, vectors, partial derivatives, optimization, multiple integrals, curves and surfaces, vector fields, divergence, curl, line and surface integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Applications include but are not limited to science, engineering, economics, and ecology.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

MATH 2520 Calculus 4: Differential Equations with Linear Algebra 5 cr

Matrices and systems, vector spaces, subspaces, linear independence, basis, dimension, linear transformations, eigenvectors, first and second order differential equations, Euler's method, phase plane analysis of linear and nonlinear systems, extensive modeling. Possible topics from numerical methods: Laplace Transforms, power series solutions, or partial differential equations. Applications include but are not limited to science, engineering, economics, and ecology.

Prerequisite: MATH 1520 (C or higher).

MnTC Goals: 4.

MATH 2700 Foundations of Mathematics and Logic: Writing Intensive 4 c

This course will be useful to all students pursuing advanced mathematics at four-year institutions, including but not limited to those intending majors in mathematics or mathematics education. Topics include basic logic, techniques of mathematical proof, set theory, relations and functions, sequences and series, and basic number theory. The course may include additional topics at the discretion of the instructor. Writing is an important part of this course and will be comprehensively integrated into the course and will be a significant part of the course work and course grade. Writing proofs will be explained and practiced in the course and some assignments will be refined through revisions.

Prerequisite: MATH 1520.

MnTC Goals: 4.

MATH 2900 Topics in Mathematics

An examination of a special topic in mathematics; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

MUSC-Music

MUSC 1100 Individualized Music Instruction

Individualized music instruction for woodwinds, brass, percussion, piano, guitar, strings, and voice. The course is open to piano, voice and guitar students with no previous background. Woodwinds, brass, percussion and strings require some previous experience playing and reading music. There is an additional fee for this course. May be repeated for a maximum of 4 credits.

Prerequisite: Prior instruction is not required for piano, voice, or guitar. Woodwind, brass, strings and percussion must have prior experience with reading and playing music.

MUSC 1113 Concert Choir 1 cr

Studies and prepares for public performance the finest in choral literature of all musical periods and styles.

Maximum of 4 credits.

MUSC 1116 Concert Band

1 cr

Rehearsals and performances covering standard band literature. Maximum of 4 credits.

Prerequisite: Ability to read music.

MUSC 1118 Orchestra

1 cr

Rehearsals and performances of orchestral music of many traditions and styles. String students may audition to perform with the Bloomington Symphony Orchestra. Maximum of 4 credits.

Prerequisite: Audition and consent of applied music coordinator.

MUSC 1120 Fundamentals of Music

3 cr

This course introduces the fundamental materials of music: pitch, rhythm, melody, harmony, and timbre. Students will learn the notation of pitch, rhythm, articulations, dynamics, and harmony. Students will analyze music and musical form common to various styles of music and create original musical compositions. Students will use music technology to demonstrate course objectives. This course assumes that students have no prior formal music training. MnTC Goals: 6.

MUSC 1121 Introduction to World Music

3 cr

This course will survey the study of world music within religious, cultural, and historical contexts.

MnTC Goals: 6, 8.

MUSC 1122 Intro to Music

1-4 cr

2 cr

3 cr

Develops an understanding and enjoyment of music. Includes a study of great music from 1600 to the present. Emphasis on developing listening skills supplemented by historical background. Open to all students wishing to increase their appreciation and understanding of music. Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

MUSC 1123 Jazz History

3 cr

An introductory course in jazz history and appreciation. Traces the historical development of jazz music from pre-Civil war through current styles and trends. Emphasis is placed on developing intelligent and perceptive listening skills. Detailed analysis of successfully recorded examples of jazz and improvisation.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6, 7.

MUSC 1124 Rock & Roll History

Rock & Roll History is a survey course that introduces the student to scholarly examination of the musical development of Rock and Roll by examining and identifying innovators, innovations, and fundamental musical characteristics from African roots through the post-twentieth century.

Recommended: Eligible for ENGC 1101 and READ 0960. MnTC Goals: 6, 7.

MUSC 1127 Class Plano: Non-Majors

2 cr

A beginning course for non-music majors with little or no keyboard background. Emphasis on basic functional skills, such as note reading, beginning chord knowledge, playing by ear and improvising, along with basic technique, elementary repertoire, and fundamental music theory. This course is not intended for students pursuing a degree in music.

MUSC 1131 Music Theory 1

3 cr

These courses (MUSC 1131 and 1132) provide a study of the materials and structure of music including notation, intervals, scales, four voice chorale style, melodic form and structure, diatonic and secondary harmony, binary and ternary forms. These courses are open to students who desire a rigorous music course.

Recommended: Eligible for ENGC 1101 and READ 1106. MnTC Goals: 6.

MUSC 1132 Music Theory 2

3 cr

These courses (MUSC 1131 and 1132) provide a study of the materials and structure of music including notation, intervals, scales, four voice chorale style, melodic form and structure, diatonic and secondary harmony, binary and ternary forms. These courses are open to students who desire a rigorous music course.

Prerequisite: MUSC 1131.

MnTC Goals: 6.

MUSC 1141 Vocal Ensemble

1 cr

Vocal ensemble performs repertoire ranging from early music to vocal jazz. May be repeated for a maximum of 4 credits.

Prerequisite: instructor's permission.

MUSC 1142 Guitar Ensemble

1 cr

Guitar duets, trios, and quartets perform music from all periods. Repertoire includes arrangements of vocal and string chamber ensembles, as well as music composed originally for the guitar ensemble. May be repeated for a maximum of 4 credits.

Prerequisite: instructor's permission.

MUSC 1143 Piano Ensemble

1 cr

Performance of four-hand piano repertoire of various style periods for one or two pianos. May be repeated for a maximum of 4 credits.

Prerequisite: instructor's permission.

MUSC 1144 Instrumental Ensemble

1 cr

Performance of chamber music: duos (sonatas), trios, quartets, quintets, and other ensemble combinations of wind, percussion, and string instruments. May be repeated for a maximum of 4 credits.

Prerequisite: instructor's permission.

MUSC 1145 Jazz Ensemble

1 cr

Instrumental jazz band; rehearses and performs a variety of jazz styles and idioms including: swing, funk, fusion, rock, hip-hop, and other current styles and trends. A historical emphasis on jazz music of the 20th and 21st centuries. An integral focus on improvisational skills and developing mature playing skills in all styles. Recommended prior experience reading music. Maximum of 4 credits.

MUSC 1146 Jazz Combo

1 cr

Performance of jazz combo music: trios, quartets, and other ensemble combinations of wind and rhythm section instruments. Recommended previous performance experience. Maximum of 4 credits.

MUSC 1151 Applied Music 1

2 cr

Individual music instruction, all instruments and voice, by arrangement with Applied Music instructors. Students are expected to have had prior individualized instruction. This course may be repeated for a maximum of 4 credits. There is an additional fee for this course.

Prerequisite: Audition and consent of Applied Music

Coordinator. Corequisite: MUSC 1152.

MUSC 1152 Performance Class

0 cr

Instrumental or vocal performance, performance etiquette, stage management, written program design and research applications for music students. Student will provide his/her own instrument, with the exception of piano. This course is offered P/NC only.

MUSC 1156 Guitar 1: Class Lessons

2 cr

With your own guitar, learn the basics of guitar technique, which will lead to any style of performance. Meant for the beginner, this class progresses quickly beyond the basics into what you need to know for going into more advanced levels.

MUSC 1157 Class Piano 1

Development of keyboard skills in sight reading, harmonization, improvisation, technique, memorization, scales, chord progressions, and transposition. These courses (MUSC 1157 and 1158), are intended for music majors and minors, but are also open to other serious students who desire a rigorous music course.

MUSC 1158 Class Piano 2

2 cr

Development of keyboard skills in sight reading, harmonization, improvisation, technique, memorization, scales, chord progressions and transposition. These courses (MUSC 1157 and 1158) are intended for music majors and minors, but are also open to other serious students who desire a rigorous music course. Prerequisite: MUSC 1157.

MUSC 1159 Piano Proficiency

0 cr

Presentation of keyboard skills to a Music Department faculty jury. The exam includes proficiency with major and minor scales, chords, arpeggios, sight reading, open score reading, harmonization, transposition, improvisation, and performance of intermediate piano repertoire from memory. This course is offered P/NC only.

MUSC 1161 Voice Class

2 cr

2 cr

This course introduces the basic principles of vocal technique: voice production, breathing, tone development, diction and pronunciation. It includes a study of vocal literature from various styles: classic, folk, Broadway. It is open to all students wishing to explore their vocal skills.

MUSC 1166 Guitar 2: Class Lessons

Class Lessons is a continuation of the skills developed in Guitar I, MUSC 1156. This course introduces chord progressions in several keys, right hand finger picking patterns, sight reading in higher positions, harmonization, transposition, movable scales, application of music theory to the fingerboard, and introduction to instrument literature. Students provide their own acoustic guitar (preferably a nylon string guitar).

Recommended: MUSC 1156.

MUSC 1170 Jazz Improvisation 1

2 cr

This course provides students with the skills necessary to create music with self-expression in jazz styles. The course includes a practical application of scales, arpeggios, and melodic lines to the student's instrument. Transcribing solos from recordings by famous jazz artists and independent study with tutorial computer programs are required. Listening and performing in class are major components of the course.

Prerequisite: Instructor permission required. The student will need the ability to perform all major scales and arpeggios on their instrument. Percussionists will perform primarily on mallet instruments. Students must have an understanding of music notation and previous experience playing an instrument.

MUSC 1175 Introduction to Finale: Music Notation Software 1 cr

This course gives students a basic working knowledge of the notational music software 'Finale'. Materials are presented in a small lab setting. Participants will have access to a computer workstation for hands-on learning and assignment preparation.

Prerequisite: Ability to read music.

MUSC 1176 Intro to Music Tech 1

2 cr

This course is intended for students interested in learning about music software applications. Topics include music notation, introduction to sequencing, tools for enhancement of practice of music skills, introduction to recording and audio editing, and other MIDI applications. Recommended: Must be able to read printed music or have completed MUSC 1100, MUSC 1120, MUSC 1131, MUSC 1151.

MUSC 1181 Ear Training 1

2 cr

This course provides training in reading at sight and in aural recognition of sound patterns through interval and rhythm reading, keyboard, dictation, and sight singing. The course is intended for music majors and minors, but also is open to other serious students who desire a rigorous music course.

MUSC 1182 Ear Training 2

2 cr

This course provides training in reading at sight and in aural recognition of sound patterns through interval and rhythm reading, keyboard, dictation, and sight singing. The course is intended for music majors and minors but also is open to other serious students who desire a rigorous music course.

Prerequisite: MUSC 1181.

MUSC 1190 Diction for Singers 1

2 cr

Diction for Singers I is a study of the phonetic sounds of the English and Italian languages to promote the ability to sing in those languages. This course covers the use of the International Phonetic Alphabet (IPA) in English and Italian, differences in pronunciation in spoken and sung English, and the pronunciation of sung Italian. This course is intended for students studying vocal performance, choral conducting and collaborative pianists. A permit to register is required from the instructor.

Diction for Singers II is a study of the phonetic sounds of the German and French languages to promote the ability to sing in those languages. This course covers the use of the International Phonetic Alphabet (IPA) in German and French, and the pronunciation of sung German and French. This course is intended for students studying voice, choral conducting and collaborative pianists. A permit to register is required from the instructor.

Prerequisite: MUSC 1190.

MUSC 1900 Topics in Music

1-4 cr

Examination of a special topic in music such as theatre orchestra and musical theatre singing. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

MUSC 2096 Internship in Music

2-8 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Music and consent of instructor and the Center for Experiential Education.

MUSC 2231 Music Theory 3

3 cr

These courses (MUSC 2231 and MUSC 2232) continue the study of Music Theory 1 and 2. They include the study of augmented sixth, Neapolitan sixth, ninth, eleventh and thirteenth chords, two voice counterpoint, fugue, sonata allegro, rondo and variation forms, 19th and 20th century tonal and non-tonal formal styles.

Prerequisite: MUSC 1132 or instructor's permission. MnTC Goals: 6.

MUSC 2232 Music Theory 4

3 cr

These courses (MUSC 2231 and 2232) continue the study of Music Theory 1 and 2. They include the study of augmented sixth, Neapolitan sixth, ninth, eleventh and thirteenth chords, two voice counterpoint, fugue, sonata allegro, rondo and variation forms, 19th and 20th century tonal and non-tonal formal styles.

Prerequisite: MUSC 2231.

MnTC Goals: 6.

MUSC 2245 Music History 1

3 cr

History of Western music: a study of the composers, styles, and social contexts of Medieval, Renaissance and Baroque music from 800 to 1750.

MnTC Goals: 6, 8.

MUSC 2246 Music History 2

3 cr

History of Western music: a study of the composers, styles, and social contexts of Classic and Romantic music from 1750 to the present.

MnTC Goals: 6, 8.

MUSC 2251 Applied Music 2

2 cr

Individual music instruction directed toward preparation of the thirty-minute Sophomore Recital or transfer audition. This course is intended for Associate of Fine Arts in Music candidates, but is open to all students who complete a successful audition and have completed 4 credits of MUSC 1151: Applied Music 1. This course may be repeated for a maximum of 4 credits. There is an additional fee for this course.

Prerequisite: Two semesters of MUSC 1151 and successful audition.

MUSC 2252 Sophomore Recital

0 cr

One half-hour recital at sophomore repertoire level. Application of performance skills, performance etiquette, and written program notes. Private instructor may request a pre-recital hearing.

Prerequisite: 8 credits of MUSC 1151 4 semesters of MUSC 1152 and audition and consent of Applied Music Coordinator.

MUSC 2270 Jazz Improvisation 2

2 cr

This course is the second in a two-part sequence. Jazz Improvisation II provides students with the skills necessary to create music with self-expression in advanced jazz styles. The course includes continued practical application of scales, arpeggios, and melodic lines to the student's instrument. Transcribing and analyzing solos from recordings by famous jazz artists and independent study with tutorial computer programs are required. Listening and performing in class are major components of the course.

Prerequisite: MUSC 1170.

MUSC 2276 Intro to Music Tech 2

2 cr

This course builds upon the foundation of MUSC 1176 and is intended for students interested in further, more advanced study of music software applications. Topics include music notation, exploration of sequencing, tools for enhancement of practice of music skills, exploration of recording and audio editing, and other MIDI applications. Recommended: MUSC 1176 or instructor's permission.

MUSC 2281 Ear Training 3

2 cr

These courses (MUSC 2281 and 2282) continue MUSC 1182 with further study of interval and rhythm reading, sight singing, keyboard, and dictation with emphasis on 19th and 20th century materials.

Prerequisite: MUSC 1182.

MUSC 2282 Ear Training 4

2 cr

These courses (MUSC 2281 and 2282) continue MUSC 1182 with further study of interval and rhythm reading, sight singing, keyboard, and dictation with emphasis on nineteenth and twentieth century materials.

Prerequisite: MUSC 2281.

MUSC 2900 Topics in Music

1-4 cr

Examination of a special topic in music. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

NANO-Nanotechnology

NANO 1900 Topics in Nanotechnology

1.4 or

Examination of a special topic in Nanotechnology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

NANO 2294 Semiconductor Processing

4 cr

Semiconductor processing refers to categories of manufacturing processes associated with fabricating an integrated circuit, a type of electrical component manufactured by the semiconductor industry. This course provides an overview explaining these special processes and how they are sequenced to produce the integrated circuit. Vacuum systems technology plays a critical role in making several of the underlying fabrication processes possible.

Prerequisite: VACT 2297 or NANO 2297 or concurrent registration. Cross-Listed as: VACT 2294.

NANO 2900 Topics in Nanotechnology

1-4 cr

Examination of a special topic in nanotechnology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

NCC-NCC All-College

NCC 1000 Paths to College Success

1 cr

This course focuses on skills and strategies needed for a successful start in college. It is designed for all new students who place into READ 0860, READ 0960, ENGC 0800, or ENGC 0900.

Prerequisite: Eligible for READ 0860 or higher, and eligible for ENGC 0800 or higher, or consent of instructor.

NCC 2096 Internship in NCC All-College

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework at Normandale and consent of instructor and the Center for Experiential Education.

NURS-Nursing

NURS 1057 Nursing Assistant Certificate

4 cr

The Nursing Assistant Certificate course prepares the student to provide physical nursing care to individuals in long-term care facilities, hospitals, or board and care homes. Students learn how to measure vital signs and assist individuals with physical needs such as personal hygiene, elimination, mobility, exercise, and nutrition. This course also includes information on emotional, spiritual, and psychosocial needs, and basic training in behavior management for persons with dementia. Students participate on campus in lecture and by practicing in the lab. Students apply what they have learned in class to residents in a long-term care facility during 24 hours of clinical participation at the end of the course. Attendance is MANDATORY, per Department of Health regulations. Students successfully completing this course are ready to take the Pearson VUE Nursing Assistant Competency Test. After passing this test students can be placed on the Minnesota Department of Health Nursing Assistant Registry. Weekly average of 2 hours lecture/3 hours lab/3 hours clinical.

NURS 1060 Nursing Assistant/Home Health Aide

The Nursing Assistant/Home Health Aide Certificate course prepares the student to provide physical nursing care to individuals in long term care facilities, hospitals, board and care homes, and in the client's own home. Students learn how to measure vital signs, assist individuals with physical needs such as personal hygiene, elimination, mobility, exercise and nutrition. This course also includes information on emotional, spiritual and psychosocial needs, and basic training in behavior management for persons with dementia. Attendance is mandatory, per Minnesota Department of Health regulations. Students successfully completing this course are eligible to take the Pearson VUE Nursing Assistant/Home Health Aide Competency Test. After passing this test students can be placed on the Minnesota Department of Health Nursing Assistant/Home Health Aide Registry. Lecture 2 hours/Lab 4 hours. Clinical 24 hours at the end of the course.

NURS 1900 Topics in Nursing

3 cr

Examination of a special topic in nursing; intended for nursing students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

NURS 2700 Health Promotion and the Role of the Professional Nurse 9 cr

This course introduces the student to the role of the professional nurse. The emphasis on health promotion across the lifespan includes learning about self-health, as well as holistic client health practices. Students learn to access and apply research evidence to guide safe preventative care. The student will incorporate communication and growth and development theory in a caring and culturally sensitive manner. The student will work as an ethical member of multi-disciplinary teams giving and receiving feedback about performance and use reflective thinking about their practice. Within the context of the nursing process, populations studied will include children, adults, older adults and the family experiencing a normal pregnancy.

Prerequisite: Acceptance into Nursing Program.

NURS 2720 Transition to the Role of the Professional Nurse 4 cr

This course is designed to expand the knowledge and skills of the LPN as they transition to the professional role within nursing. Emphasis is placed on health promotion through the lifespan and incorporates theories related to evidencebased practice, quality and safety, communication, collaboration, clinical decision-making/reasoning, informatics, assessment, caring, and health-illness continuum.

Prerequisite: Acceptance into Nursing Program. Offered: Fall, Spring.

NURS 2750 **Nutrition and the Role of the Professional** Nurse

This course introduces the student to the role of the nurse in promoting and supporting nutritional health. Emphasis is on the role nutrition plays in health promotion/prevention of illness, recovery from acute illness and/or management of chronic illness. Students learn to access evidence to support healthy nutritional choices that reduce risk factors for disease and/or illness across the lifespan. Students explore how culture, ethnicity, socio-economic status, nutritional trends and controversies, and integrative therapies influence the nutritional health of the client. Prerequisite: Acceptance into Nursing Program.

NURS 2800 **Chronic and Palliative Care**

7 cr

2 cr

This course focuses on the nursing care of clients experiencing chronic illness and/or end of life. Emphasis is placed on understanding the "lived experience" of clients and families. Ethical issues related to advocacy, selfdetermination, and autonomy are explored. Evidencebased practice is used to support appropriate focused assessments and management of care of clients experiencing concurrent illnesses/co-morbidities. Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

NURS 2820 Pharmacology and the Role of the Professional 3 cr

This course introduces theoretical concepts that enable students to provide safe and effective care related to pharmaceuticals and natural products to diverse clients across the lifespan. A framework is presented for approaching the study of pharmacotherapeutics including pharmaceutical research and regulation, quality and safety, major drug classifications, and clinical management. Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

NURS 2850 Applied Pathophysiology for Nursing I

2 cr This course introduces a holistic perspective of pathophysiological processes and the disruption in normal body function. Emphasis will be on objective and subjective manifestations of common chronic health problems resulting from environmental, genetic, and stress-related maladaptations to provide a foundation for nursing care. This course complements selected topics addressed in Chronicity and End of Life to provide a comprehensive understanding of disease processes.

Prerequisite: NURS 2700 or NURS 2720 (C or higher) and NURS 2750 (C or higher).

Acute and Complex Care NURS 2910

This course focuses on the nursing care of clients experiencing acute disruptions of health and/or end of life issues. Emphasis is placed on understanding and application of theory and skills required to provide nursing care to clients with complex and/or unstable conditions. Evidence-based practice is used to support appropriate focused assessments and effective, efficient nursing interventions. Knowledge of life span, developmental factors, cultural variables and legal aspects of care guide the ethical decision making in delivery of care. Prerequisite: NURS 2800, NURS 2820 and NURS 2850 (C or higher).

NURS 2920 Applied Pathophysiology for Nursing 2

This course will facilitate ongoing critical thinking and analysis of pathophysiological concepts. Emphasis will be on interpretation and prioritization of data resulting from environmental, genetic, and stress-related maladaptations. This course complements the selected topics addressed in Acute and Complex Care to provide a comprehensive understanding of disease processes.

Prerequisite: NURS 2800 and NURS 2850 (C or higher).

NURS 2950 Nursing Leadership 1

3 cr

2 cr

This course focuses on prioritization, delegation, and supervision of nursing care of clients across the lifespan. Health care policy, finance, and regulatory environment issues are analyzed. Emphasis is on planning, collaborating and coordinating care for individuals and groups across the care continuum.

Prerequisite: NURS 2800, NURS 2820 and NURS 2850 (C or higher).

PHIL-Philosophy

PHIL 1101 Introduction to Philosophy

3 cr

An introduction to the study of philosophy, with emphasis on developing skills in philosophical modes of inquiry and analysis. Major content areas include epistemology, metaphysics, and value theory, and may also include topics in political philosophy, philosophy of science, philosophy of mind, philosophy of law, philosophy of religion, and philosophy of language. Readings will include both historical and contemporary texts.

Recommended: Eligible for READ 1106.

MnTC Goals: 6.

PHIL 1102 Logic 3 cr

This course is the study of the deductive analysis of arguments using the tools of contemporary symbolic logic. The course includes the examination of basic logical concepts (logical form, validity, logical truth, consistency), symbolization of arguments expressed in natural language, truth tables, formal proofs or truth trees, and elementary quantification theory.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 4.

PHIL 1103 Ethics

3 cr

This course is an introduction to the philosophical study of morality. It will examine several important ethical theories concerning virtue and vice, the nature of right action, standards of value, and conceptions of the good life. Contemporary moral issues will be critically examined in light of these theories; topics may include marriage equality, animal rights, torture, euthanasia, freedom of speech, punishment and the death penalty, globalization and justice, and other issues. The course may also include topics in metaethics, such as ethical relativism. This course will help students to think analytically about the moral judgments we are tempted to make, with the goal of developing well-reasoned positions on important moral issues of personal and/or social concern. Recommended: Eligible for READ 1106.

MnTC Goals: 6, 9.

PHIL 1105 Philosophy of Religion

3 cr

Content will include both classic and contemporary philosophy of religion material including but not limited to: Proofs for the existence of divine beings or God; analysis of the types of proof including mystical experiences, faith, or rational acceptance for religious and spiritual belief; Eastern philosophy from the scriptures of Daoism, Confucianism, Buddhism, and Hinduism; Indigenous religious and mythic traditional understanding of human nature, society and cosmic structure. Course will also evaluate alternatives to religious or spiritual beliefs including criticisms of them from perspectives of secular humanism, atheism, agnosticism and contemporary issues associated with our beliefs in modern life. MnTC Goals: 6, 8.

PHIL 1140 Environmental Ethics

Do animals have rights? Do we have moral obligations to preserve endangered species? What is sustainable development and do we have an ethical obligation to promote it? Do people, including future generations, have a right to environmental protection? What is environmental racism? Do we have a duty to preserve biodiversity? Does nature have value, and if so, what kind of value? These are just a few of the questions addressed in environmental ethics. Environmental ethics is the study of the moral relationship between humans and the rest of nature. In this course, we will examine various efforts to understand the nature and extent of our duties to the nonhuman world. After a general introduction to a few major ethical theories and concepts in moral philosophy, we will investigate a variety of environmental issues through the lens of these theories and concepts. At the same time, we will critically reflect on the shortcomings of traditional moral theories and investigate new concepts, theories, and perspectives as ways of understanding the moral relationship between humans and nature.

Recommended: Eligible for READ:

MnTC Goals: 9, 10.

PHIL 1150 Introduction to World Religions

3 cr A comparative course which examines the fundamental beliefs, practices, and traditions of world religious traditions. The origins, major figures, sacred scriptures and creeds will be reviewed and compared. Topics may include justification for beliefs, cosmology, practices of the faithful, and the role of women, artistic expression, and contemporary issues. Major religious traditions including Hinduism, Buddhism, Daoism, Confucianism, Judaism, Christianity, and Islam will be studied. Additionally, alternative spirituality, paganism, Egyptian religions, Native American traditions, atheism, secularism and other religious movements may be covered.

Prerequisite: Eligible for READ 1106.

MnTC Goals: 6, 8.

PHIL 1160 Philosophy of Art

The study of the nature of art, the character of our experience of works of art, and standards for the interpretation and evaluation of works of art. May include examination of the nature of beauty, culturally bounded conceptions of art, the nature of artistic expressiveness and imagination, and the possibility that there are objective criteria for the evaluation of works of art. Readings will be primarily contemporary.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 6.

PHIL 1170 Business Ethics

Should companies that employ sweatshop labor be boycotted? Who should take responsibility for the financial crisis of 2008? Is bribery morally acceptable if everyone is doing it? Is corporate downsizing morally wrong? Do corporations have any social responsibilities other than maximizing profits? Is capitalism an unjust economic system? These are just a few of the questions addressed in business ethics. In this course, we will examine various efforts to understand the ethical dimensions of capitalism and the conduct of business in society. After an introduction to several major ethical theories and concepts in moral philosophy, we will investigate a variety of ethical issues that arise in the conduct of business.

Recommended: Eligible for READ 0960.

MnTC Goals: 6, 9.

PHIL 1180 Biomedical Ethics

3 cr

Should physician-assisted suicide be legalized? Is there a right to health care? Should genetic technologies be used for enhancing human capabilities? What ethical ideals ought to govern the patient-provider relationship? These are just a few of the questions addressed in biomedical ethics. Biomedical ethics is the study of the ethical issues that arise in the practice of medicine and health care. In this course, we will begin by examining several major ethical theories, including critiques of these theories that have led to alternative approaches to ethical decisionmaking. We will then investigate a range of specific ethical issues through the lens of these theories and approaches. MnTC Goals: 6, 9.

PHIL 1190 **Ethics for the Digital Age**

3 cr

Big data and information technology impact all areas of life. Rapid advances in technologies such as Al and machine learning, as well as the evermore sophisticated advances in the collection, analysis, and use of data, have created opportunities for individual and social good. But ethical frameworks for assessing the impacts of these advances lag behind. Does the use of predictive analytics in health care, employment, and policing reinforce or reduce bias and discrimination? Is privacy dead -- and should we care? Are algorithms morally neutral? Should big tech be regulated? Does Facebook cause more harm than good? These are some of the questions we will address as we explore the ethical implications of data and information technology. Through understanding theories and concepts in moral philosophy, we will learn how to reason about and critically assess ethical issues in data and information technology.

MnTC Goals: 6, 9.

3 cr

3 cr

PHIL 1900 Topics in Philosophy

Examination of a special topic in philosophy; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

PHIL 2096 Internship in Philosophy

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Philosophy and consent of instructor and the Center for Experiential Education.

PHIL 2900 Topics in Philosophy

1-4 cr

2-4 cr

Examination of a special topic in philosophy; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

PHYS-Physics

PHYS 1001 Energy, Climate & Physics in Society 3 cr

This course covers topics in physics with an emphasis on conceptual understanding of physics principles and the technology applications related to current issues, including the sources and uses of energy, climate change, and the ethical dimensions of technological choices. This course will give students the solid foundation in physics they need to be critically thinking, scientifically literate citizens able to distinguish scientifically sound, evidence-based technological decisions from those that are not. Topics may include energy production and conservation, radioactivity and nuclear weapons, transportation options, various consequences of climate change, and invisible light. The personal, political, and ethical dimensions of technological choices will be a significant emphasis in this course. Lecture 3 hours: lab 0 hours.

MnTC Goals: 3, 9.

PHYS 1002 Energy, Climate & Physics in Society Laboratory 1 cr

This is an optional laboratory course for students who are concurrently enrolled in PHYS 1001 or who have previously completed PHYS 1001 (C or higher). The combination of PHYS 1001 and PHYS 1002 satisfies the MnTC Goal 3 laboratory science requirement.

Prerequisite: PHYS 1001 (C or higher) or concurrent

enrollment. MnTC Goals: 3.

PHYS 1050 Survey of Classical Physics

4 cr

A one-semester introductory physics course focusing on the fundamental concepts of physics. Topics are chosen from classical physics and may include one-dimensional kinematics, laws of motion, conservation laws, heat, waves, sound, light, electricity, and magnetism. Physics problems will be solved using algebra. Lecture 3 hours; lab 2 hours. Prerequisite: Eligible for MATH 0700.

MnTC Goals: 3.

PHYS 1104 Survey of Astronomy

3 cr

A one-semester survey course focusing on scales and structures of the universe, observable motions of the sun, moon, and stars, patterns within the solar system, life cycles of stars, evolution of the universe. Additional topics may include telescopes and light, planetary science, extrasolar planet discovery, and space exploration. This course is not a prequel to PHYS 1114.

MnTC Goals: 3.

PHYS 1110 College Physics 1

4 cr

This is the first semester of a two-semester sequence of non-calculus, introductory physics. This course uses College Algebra. Topics include kinematics, dynamics, gravitation, momentum, energy, heat, and fluids. Lecture 3 hours: lab 2 hours.

Prerequisite: MATH 1100 (C or higher).

MnTC Goals: 3.

PHYS 1111 College Physics 2

4 cr

This course is a continuation of PHYS 1110. This course uses College Algebra. Topics include oscillations and waves, electricity, magnetism, electromagnetic waves, and optics. Lecture 3 hours; lab 2 hours.

Prerequisite: PHYS 1110 (C or higher) and MATH 1100 (C or higher).

MnTC Goals: 3.

PHYS 1114 Introductory Astronomy

4 cr

A one-semester introductory course in astronomy covering the tools and methods of astronomy and the physics of the solar system, stars, galaxies, and the universe. This course requires a background in intermediate algebra. Laboratory includes tools and methods of astronomy; data collection and analysis; and observations (when feasible). Lecture 3 hours; lab 2 hours. This course is not a sequel to PHYS 1104.

Prerequisite: Eligible for MATH 1100.

MnTC Goals: 3.

PHYS 1121 Physics 1 for Scientists and Engineers

This is the first semester of a two-semester sequence of calculus-based introductory physics. This course uses calculus. Topics include kinematics, dynamics, rotational motion, gravitation, conservation laws of momentum and energy, thermal physics, and periodic motion. Optional topics include fluids and thermodynamics. This course meets requirements for students majoring in engineering, mathematics, computer science, or the sciences. Lecture 4 hours; lab 2 hours.

Prerequisite: MATH 1510 (C or higher), MATH 1520 (C or higher) or concurrent registration, and eligible for READ 1106.

MnTC Goals: 3.

PHYS 1122 Physics 2 for Scientists and Engineers 5 cr

This course is a continuation of PHYS 1121. This course uses calculus. Topics include wave phenomena, electricity, magnetism, an introduction to Maxwell's equations, electromagnetic waves, and optics. This course meets requirements for students majoring in engineering, mathematics, computer science, or the sciences. Lecture 4 hours; lab 2 hours.

Prerequisite: PHYS 1121 (C or higher) and MATH 1520 (C or higher). Recommended: MATH 2510 or concurrent registration (preferred) or MATH 2520 (C or higher) or concurrent registration.

MnTC Goals: 3.

PHYS 1201 Physics 1 with Biomedical Applications

This is the first semester of a two-semester sequence in introductory physics. This course uses the basic concepts of calculus such as the derivative and simple integration. The course covers topics from kinematics, dynamics, torque, energy, fluids, and thermal physics. This course relates fundamental concepts of physics to biomedical applications; it meets requirements for students majoring in the biological sciences and is appropriate for students who plan to enter the health professions. Lecture 3 hours; lab 2 hours.

Prerequisite: MATH 1400 (C or higher) or MATH 1510 (C or higher).

MnTC Goals: 3.

PHYS 1202 Physics 2 with Biomedical Applications

This course is continuation of PHYS 1201. This course uses the basic concepts of calculus such as the derivative and simple integration. The course covers topics from waves, electricity, simple DC circuits, magnetism, atomic structure and spectra, and the physics of medical imaging. This course relates fundamental concepts of physics to biomedical applications; it meets requirements for students majoring in the biological sciences and is appropriate for students who plan to enter the health professions. Lecture 3 hours; lab 2 hours.

Prerequisite: PHYS 1201 (C or higher), and MATH 1400 (C or higher) or MATH 1510 (C or higher).

MnTC Goals: 3.

PHYS 1900 Topics in Physics

1-4 cr

An examination of a special topic in physics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

PHYS 2096 Internship in Physics

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Physics and consent of instructor and the Center for Experiential Education.

PHYS 2250 Modern Physics

4 cr

A one-semester introduction to the topics of modern physics including the special theory of relativity, solid state physics, and quantum theory. This course requires a background in calculus-based physics and differential equations. This course is generally required for electrical engineering, physics, and astronomy majors. Lecture 3 hours; lab 0 hours.

Prerequisite: PHYS 1121, PHYS 1122 and MATH 2510

Recommended: MATH 2520.

MnTC Goals: 3.

4 cr

4 cr

PHYS 2900 Topics in Physics

1-4 cr

An examination of a special topic in physics; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

POLS-Political Science

POLS 1130 Introduction to U.S. Politics

3 cr

Considers fundamentals of U.S. politics including constitutional principles, organization of government, basic freedoms, civil liberties, civil rights, political cultures, parties and interest groups, campaigns and elections, and national controversies.

MnTC Goals: 5, 9.

POLS 1132 Introduction to Comparative Politics

Compares political and economic systems, political and economic conditions, and political and economic policies of diverse countries and regions around the world.

Comparisons and contrasts will consider governments, cultures, patterns of political and economic development, as well as political values, processes, and institutions.

Includes comparisons, where apt, with United States.

Analyses will include statistical, historical, and forecast data, as well as theoretical perspectives.

MnTC Goals: 5, 8.

POLS 1133 Middle East Politics

3 cr

Explores the historical background and current dynamics of Middle Eastern politics, including the causes and consequences of political, economic, social, cultural, military, ethnic, nationalist, and religious conditions. Central concerns include post-colonial experiences, political and economic development, political change and stability, democracy and autocracy, corruption, regional conflicts, foreign policies, and current and enduring challenges.

MnTC Goals: 5, 8.

POLS 1135 Introduction to Political Ideas

3 cr

Explores political ideas, ideologies, and movements by considering popular culture (including novels, movies, music, and articles), "classics", and primary sources. Topics may include enduring and current controversies concerning justice, power, violence, authority, freedom, government, the state, democracy, capitalism, economic prosperity, security, equality, inequality, corruption, terror, nationalism, and "the good life" in a political community.

MnTC Goals: 5, 9.

POLS 1150 Introduction to World Politics and Globalization

3 cr

Develops a global perspective by exploring diverse global issues such as security, human rights, environment, economic development, foreign policies, character of globalization, interactions of nation-states and other actors, origins and effects of global capitalism, and changing effects on global affairs of technological innovations, international organizations, multinational corporations, social movements and groups, and ideologies. Course provides tools for interpreting and evaluating global politics, and it furnishes background to pursue additional courses in World Politics.

MnTC Goals: 5, 8.

POLS 1152 Model United Nations

3 cr

Introduces students to the workings of the world's most important international organization - the United Nations (UN) - and to the practice of negotiation and diplomacy. Course emphasizes understanding current global issues and offers direct experience in the practice of politics. Course also improves students' ability in the "civic arts" of negotiation, advocacy, public presentations, and policy analysis. All students in the class will prepare for and participate in the Arrowhead Model United Nations conference held each April.

MnTC Goals: 5, 9.

POLS 1195 Conflict and Negotiation

3 cr

Politics is conflict over values, ideas, and resources. Political Science is, in part, the study of conflict and conflict management. This course introduces students to perspectives on power and conflict and to diverse strategies for resolving conflict in various political, legal, social and cultural settings. This course develops expertise, confidence, and skills for managing, transforming, and engaging conflict constructively, primarily through negotiation and mediation. Students reflect on their own style of conflict management and dispute resolution and on the roles of power, conflict, and negotiation at the individual, group, organizational, state, and system levels. The course is extremely hands-on and interactive. Extensive, frequent role plays and simulations demonstrate course themes and provide opportunities to practice managing conflict, resolving disputes, negotiating, and mediating.

MnTC Goals: 5, 7.

POLS 1900 Topics in Political Science

1-4 cr

Examines specific topics in politics and public policy; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

POLS 2096 Internship in Political Science

2-4 cr

Explores careers and training in a supervised work setting. Combines theory with field experience in a political setting to learn how public policy is shaped. Students spend approximately 2.5 hours per week, per credit on the job, and attend weekly seminars. Students may earn 3 to 8 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Political Science and consent of instructor and the Center for Experiential Education.

POLS 2250 Constitutional Law

Explores the U.S. Constitution and Bill of Rights as elements of national government and criminal justice. Addresses equal protection, due process, First Amendment, search and seizure, rights of the accused, rights of prisoners, presidential authority, and historic Supreme Court cases. Course includes debates and mock trials.

MnTC Goals: 5, 9.

POLS 2900 Topics in Political Science

1-4 cr

Examines specific topics in politics and public policy; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum. Prerequisite: Topic-dependent.

PSYC-Psychology

PSYC 1100 Psychology in Modern Life

3 cr

Psychology in Modern Life is designed to translate psychology into applications to everyday life. Examples of life situations addressed include topics such as stress management, health behaviors, behavior in groups, interpersonal relationships and psychological health. The course has an empirical focus, which means that we will apply data collected via the scientific method to matters of living, and develop our critical thinking skills in order to evaluate claims about healthy living made by sources from within and outside the psychological community.

MnTC Goals: 5.

PSYC 1108 Psychology of Death and Dying

3 cr

This course is an introduction to the historical and sociocultural forces which shape our understanding of death and dying. The changing nature of the dying patient's situation, critical issues in end-of-life care, ceremonies and rites enacted at the time of death, legal considerations, bereavement, grief, and mourning are introduced with a lifespan and cross-cultural perspective.

MnTC Goals: 7, 9.

PSYC 1109 Child and Adolescent Development 3 cr

This course focuses on the physical, cognitive, and psychosocial areas of development from conception through adolescence. Relevant theories, research, methods and issues are addressed. An interactionist approach regarding the influence of both heredity and environment is emphasized.

MnTC Goals: 5.

PSYC 1110 Introduction to Psychology

4 cr

This course is an introduction to the scientific study of human behavior and mental processes. It prepares students for more advanced coursework in psychology and provides a basic understanding of psychology for those entering other fields. The course introduces the problems, methods, and findings of modern psychology to beginning students.

Recommended: Eligible for READ 1106.

MnTC Goals: 5.

PSYC 1140 Psychology of Gender

3 cr

3 cr

This course is an exploration of gender as a central organizing feature of human behavior and an overall picture of gender from a psychological perspective. Students will examine various theoretical models of male and female development from a psychological perspective. MnTC Goals: 5, 7.

PSYC 1220 Psychology of Adulthood and Aging

This course is an exploration of the physical, cognitive, and psychological factors associated with aging. The primary focus of the class is on older adulthood; however, information concerning all years of adult development will be presented within a developmental framework. The course is also concerned with individual differences among older adults, the promotion of optimal functioning through the aging process, and death and dying.

MnTC Goals: 5, 7.

PSYC 1900 Topics in Psychology

1-4 cr

Examination of a special topic in psychology; intended for all students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

PSYC 2096 Internship in Psychology

2-4 cr

This course provides the student with the opportunity for career exploration and training in a supervised work setting. The course combines theory with field experience in settings related to psychology. Requirements include: relevant reading in psychological literature, approximately 2.5 hours per week, per credit, on the job, and a written project that integrates the literature with the work experience. Students will meet individually with appointed psychology faculty about eight times during the semester for project guidance.

Prerequisite: Previous coursework in Psychology and consent of instructor and the Center for Experiential Education.

PSYC 2100 Statistics for the Behavioral Sciences 4 cr

This course introduces statistical analysis and research designs used in the behavioral sciences. In it, students use statistical software (e.g., SPSS) to conduct descriptive and inferential data analyses. They choose and apply statistical procedures to help answer psychological and behavioral scientific research questions, and gain an introduction to commonly used research methods. In order to see how statistical methods and findings are reported in behavioral science research, students read, interpret, evaluate, and write APA-style Results sections.

Prerequisite: PSYC 1110 and completion of one of the following: MATH 1080, MATH 1090, MATH 1095, MATH 1100 or math placement higher than MATH 1100. MnTC Goals: 5.

PSYC 2200 Abnormal Psychology

3 cr

This course is a survey of the scientific study of psychological disorders such as obsessive-compulsive disorder, depression, bipolar disorder, and schizophrenia. Topics include how people are diagnosed, possible causes of disorders, and research on the treatment of disorders. Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

PSYC 2210 Developmental Psychology: Life Span

4 cr

Developmental Psychology is the exploration of child, adolescent, and adult development beginning with conception and continuing through death. Emphasis is placed on the theoretical, experimental, and applied aspects of development. Physical, cognitive, and psychosocial realms of development will be investigated for each age range. Particular attention is given to the application of research and theory to current issues. Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

PSYC 2300 Psychology of Personality

3 cr

This course introduces students to the scientific study of human personality with an emphasis on individual differences. Important theories and research studies of personality are discussed. Topics include personality traits; biological, psychological, and social-cultural influences on personality; and links between personality and everyday life.

Prerequisite: PSYC 1110.

MnTC Goals: 5.

PSYC 2400 Psychology of Religion and Spirituality

3 cr

This course introduces students to the psychology of religion and spirituality. Topics include how people know what they know about religious and spiritual phenomena; psychosocial characteristics of religious traditions; individual differences in religiousness and spirituality; stereotyping and prejudice perpetrated by, and directed toward, religious and non-religious groups; biological, psychological, and social/cultural influences on personal religiousness; religious and spiritual experiences such as awe; religion, spirituality, and health; religion and violence; mindfulness; forgiveness; compassion; and gratitude.

Prerequisite: PSYC 1110.

MnTC Goals: 5, 7.

PSYC 2500 Biopsychology

3 cr

Biopsychology provides an overview of neuroanatomy, basic principles of neural conduction, and basic techniques used in biopsychological investigations. It reviews current knowledge of the biological bases of human behavior and experience: sensation and perception, movement, cognition and language, attention, learning, memory, stress, wakefulness and sleep, psychiatric disorders. The course examines how important questions in psychology can be addressed with biological methods.

Prerequisite: PSYC 1110 or BIOL 1102.

MnTC Goals: 5.

PSYC 2600 Introduction to Social Psychology

3 cr

This course is an introduction to social psychology, which is the scientific study of how social contexts influence and shape individual behavior. Topics typically covered include the relation of self and culture, person perception, attitudes and their relation to behavior, attribution theory, persuasion, conformity and obedience, interpersonal attraction, prejudice and discrimination, aggression, group dynamics, and intergroup relations. Multicultural factors may be explored within the context of several of the abovementioned topic areas.

Prerequisite: PSYC 1110.

MnTC Goals: 5.7.

PSYC 2900 Topics in Psychology

1-4 cr

Examination of a special topic in psychology; intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

READ-Reading

READ 0860 Reading Skills

This course offers preparation for reading college-level material. Topics include independent and self-regulated reading, the reading process, and reading engagement. A-F grading (option to choose P/NC grading).

Prerequisite: EAP 0855 (C/P or higher) or eligible for READ

READ 0955 Fast Track Reading 6 cr

This course combines topics from both the Reading Skills course as well as the Reading/Study Skills for College course in an accelerated, one-semester class that is designed to provide the reading and study skills necessary for success in college. It is designed to develop vocabulary, effective literal, inferential, and introductory critical reading comprehension in fiction and academic content areas with study strategies that are necessary for success in college. This course satisfies both the READ 0860 and READ 0960 requirements. P/NC grading (option to choose A-F grading). Prerequisite: EAP 0855 (C/P or higher) or eligible for READ 0860. Recommended: Accuplacer score between 50 and 59 and/or B or higher in EAP 0855.

READ 0960 Reading/Study Skills for College

This course is designed to develop higher level reading strategies including critical and inferential reading comprehension and textual analysis while also emphasizing college study strategies within the scope of college-level reading materials and texts. A-F grading (option to choose P/NC grading).

Prerequisite: READ 0860 (C/P or higher) or eligible for READ 0960.

READ 0961 Reading Strategies Review 1 cr

This course is designed to assist students in reviewing effective reading strategies for college course work. Strategies include effective literal, inferential, and introductory critical reading comprehension. This course is intended for review of strategies in order to improve on the Accuplacer placement test. After successful completion of this course, students may retake the Accuplacer placement test. This course does not take the place of READ 0960 for placement. P/NC grading (option to choose A-F grading). Prerequisite: Eligible for READ 0960.

READ 1104 College Study Strategies 3 cr

This course is designed to assist students in developing effective study strategies for college coursework. Skills include goal setting, time management, organization, concentration, vocabulary acquisition, memory improvement, listening, note taking, test taking, test anxiety management, textbook processing, and keys to successful online learning.

Prerequisite: Eligible for READ 1106.

This course is designed to help students learn and develop the critical reading and thinking skills needed in order to comprehend, analyze, and interpret college-level material. Students will be introduced to a variety of genres which may include poetry, fiction, nonfiction, essays, and textbook materials.

Prerequisite: READ 0960 (C/P or higher) or eligible for READ 1106.

READ 1110 Study and Thinking Skills in the Academic Disciplines

2 cr

This course is designed to help students acquire a repertoire of active study and thinking skills for use in academic disciplines.

Prerequisite: READ 0860 (C/P or higher) or eligible for READ 0960.

READ 1230 MTLE Reading Seminar

1 cr

This course is designed to assist students in reviewing effective reading and test taking strategies needed for passing the Minnesota Teacher Licensure Examination (MTLE). Reading strategies include effective literal, inferential, critical reading comprehension, and critical reasoning skills.

READ 2096 Internship in Reading

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Reading and consent of instructor and the Center for Experiential Education.

SOC-Sociology

SOC 1100 Modern US Society: Everyday Life in the United States of America 3 cr

This survey course will provide valuable information of the United States' social system including U.S. values, mores, and the popular culture. The course will highlight the principles and practices of U.S. society and culture and analyze the ways in which they manifest in everyday life. The course will also focus on the diversity and multicultural make up of U.S. society.

Recommended: Eligible for ENGC 0900 and READ 0960. MnTC Goals: 5, 7.

SOC 1101 Cultural Diversity

3 cr

This course aims to promote understanding and appreciation of cultural diversity. Sociological and anthropological perspectives will be used to examine socio-cultural diversity, the challenges and opportunities it presents, and its importance in our dynamic contemporary world. The course also emphasizes processes such as workplace diversity and long-term trends in cultural pluralism, which are transforming our everyday experiences and identities.

Cross-Listed as: ANTH 1101.

MnTC Goals: 5, 8.

SOC 1102 Love, Sex and Family

This course explores the ways that our intimate relationships affect and are affected by society. Through studying love, sexuality, cohabitation, marriage, gender roles, parenting, conflict resolution and divorce, students learn about the diverse, complex, and changing nature of our intimate connections and family lives.

MnTC Goals: 5, 7.

SOC 1103 Social Change in Action and Service Learning 3 cr

This course is designed to give students the opportunity to serve as volunteers in the community, to study the social justice problems to which they are responding with their volunteer efforts, and to look at local and global social systems in which these problems exit. This course examines the role of philanthropy and community service; it also explores alternative ways that society responds to community needs. This course has a requirement of 60 hours of service during the semester in order to pass the class. Service sites (approximately 15-25) will be chosen by the instructor in order to meet the learning goals of the course.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 7, 9.

SOC 1104 Introduction to Sociology 3 cr

An examination of the basic social processes which give order and structure to our lives: socialization, changing social roles, power and privilege, modernization and culture. Service Learning option available.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5.

SOC 1106 Social Problems in a Changing World

This is an overview of contemporary social problems in both the U.S. and around the world using various sociological perspectives, analytic insights, and methodologies. The course critically analyzes a range of social issues such as poverty and inequality, racism, sexism, family breakdown, education, crime and violence, political economy, unemployment, the environment, globalization, and militarism and terrorism, among other emerging structural and systematic processes affecting the survival of peoples nationally and globally.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 8.

3 cr

3 cr

SOC 1109 Wealth and Poverty

3 cr

Using a sociological perspective, this course explores the causes and consequences of inequality in the United States as well as in other countries across the globe. This course addresses the historical roots, sociological explanations and contemporary realities of inequality and explores the effects of social stratification on individuals and groups within society.

Prerequisite: Eligible for ENGC 1101 and READ 1106.

MnTC Goals: 5, 7.

SOC 1115 Sociology of Sex and Gender Roles 3 cr

An in-depth examination of the gender roles of males, females, and transgender individuals; the concept that "biology is destiny" and the effects of sex-role stereotyping in personal lives and in relationships. LGBTQIA issues explored.

MnTC Goals: 5.7.

SOC 1116 Popular Culture & Media Sociology

3 cr

Using a sociological perspective, this course explores the diverse constructions of popular culture within the U.S. and selected parts of the world. An important component within this area of sociology addresses how mass media both reflect and influence popular cultural trends. This course is designed to increase students' abilities to understand, explain, and analyze popular culture via the lens of the sociological imagination, thus increasing their agency as social actors.

MnTC Goals: 5, 9.

SOC 1120 Introduction to Women's and Gender Studies 3 cr

This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.

Cross-Listed as: ANTH 1120 and WMST 1120.

MnTC Goals: 5, 9.

SOC 1121 Women Across Cultures

This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation.

Cross-Listed as: ANTH 1121 and WMST 1121.

MnTC Goals: 5, 8.

SOC 1900 Topics in Sociology

3 cr

Examination of a special topic in sociology; intended for all interested students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

SOC 2096 Internship in Sociology

2-4 ci

This internship course explores careers and training in a supervised work setting. Combines theory with field experience in the field of human services. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Sociology and consent of instructor and the Center for Experiential Education.

SOC 2108 Social Psychology

3 cr

A focus on the classical issues of social psychology: identity, conformity and obedience, aggression, alienation, communication, and prejudice and how we respond to and influence each other.

Prerequisite: SOC 1104. MnTC Goals: 5, 7.

SOC 2110 American Minority Relations

3 cr

This course examines intergroup relations in the U.S. focusing on majority-minority interactions, with the following emphases: race and ethnicity, prejudice and discrimination, inequality, and assimilation and pluralism; may include global comparisons and/or analysis of status disadvantages pertaining to women, gays, lesbians, bisexuals, and transgender, as well as the aged, poor, and disabled

Prerequisite: SOC 1104. MnTC Goals: 5, 7.

SOC 2112 Criminology

3 cr

An exploration of crime: the definitions of crime, the patterns that crimes follow, and the prevalence of certain types of crimes. Factors that cause crime and society's responses to crime are investigated.

Prerequisite: SOC 1104.

MnTC Goals: 5.

SOC 2114 Families in Crisis

3 cr

Theoretical perspectives on sociology of families including policy and diversity. Theoretical perspectives on family violence, spouse and child maltreatment and neglect, elder abuse, alcohol abuse, consequences for family functioning, and criminal justice system responses.

Prerequisite: SOC 1102 or SOC 1104 or SOC 1106.

MnTC Goals: 5, 7.

SOC 2125 Social Deviance

3 cr

Sociological examination of significant rule-making and rule-breaking that surveys explorations / explanations of non-conformity relevant to juvenile delinquency, crime, mental illness, substance abuse, and certain other non-normative lifestyle.

Prerequisite: SOC 1104. MnTC Goals: 5, 9.

SOC 2130 Introduction to Criminal Justice

3 cr

Provides an overview of the criminal justice system. Includes the historical development of law enforcement as well as an exploration of the components of the criminal justice system and the functions, jurisdictions, and interrelationships of various law enforcement agencies. Recommended: SOC 1104.

MnTC Goals: 9.

SOC 2131 Juvenile Justice

3 cr

This course provides an overview of theories of delinquency and the Juvenile Justice System. Special emphasis will be on Minnesota Statutes, Rules for Juvenile Court, and Supreme Court cases which mandate how the Juvenile Justice System works in Minnesota. This course meets specific POST-learning objectives for pre-service law enforcement students to understand what police officers are mandated to do when juveniles are victims or offenders, and how those laws are different from the adult criminal justice system.

Recommended: SOC 1104.

SOC 2132 Police and Community

3 cr

Examines the interaction of peace officers with members/groups in the communities with a focus on minority groups and the application of community oriented policing principles. This course meets specific POST-learning objectives (as listed in the outline) for pre-service law enforcement students including community oriented policing philosophy, crime prevention, cultural diversity, bias motivated crime and the proper police response, domestic abuse and assault state mandates, ethics, police professionalism, and the use of discretion by the police. Recommended: SOC 1104.

SOC 2133 Community Crime Prevention

This course emphasizes the essential relationship between citizens and police. The course will focus on how both groups can work together to provide safer environments for our communities. This course includes an overview of crime causation theories, history of crime prevention, techniques and terminology of crime prevention, crime analysis, and the reduction of risks through controlling elements within our surroundings. Topics covered in this course meet specific POST learning objectives for preservice law enforcement students and will permit students to take the MCPA Crime Prevention Specialist exam.

SOC 2134 Corrections 3 cr

A sociological analysis of corrections and punishment in modern society, exploring the prison system, community-based corrections, and alternatives to incarceration.

Recommended: SOC 1104.

SOC 2900 Topics in Sociology

1-4 cr

Examination of a special topic in sociology (e.g. Community Crime Prevention); intended for second-year students. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

SMLI-Somali

SMLI 1100 Beginning Somali 1

5 cr

This course provides an introduction to Somali language and culture. Students begin to develop competencies in speaking, listening, reading and writing. Culture is an integral part of the course and is incorporated through the analysis of simple texts, film, music, traditions, and daily life in the Somali-speaking world. The entire present tense is covered.

MnTC Goals: 8.

SMLI 1111 Somali Civilization and Culture

3 cr

This course acquaints students with aspects of the culture and civilization of the Somali speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Somali-speaking peoples. Taught in English.

MnTC Goals: 6, 8.

SMLI 1200 Beginning Somali 2

5 cr

This course provides a continuation of the listening, speaking, reading, and writing competencies developed in SMLI 1100. Students further explore cultural differences, helping them develop a deeper understanding of the world and a greater cultural perspective. The major grammatical focus is on the past and future tenses.

Recommended: SMLI 1100.

MnTC Goals: 8.

SMLI 2100 Intermediate Somali 1

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Somali-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes the present subjunctive, complex sentences, and the conditional and the future tenses.

Recommended: SMLI 1200.

MnTC Goals: 6, 8.

SMLI 2200 Intermediate Somali 2

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Somali-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes compound verb tenses, gerunds, and passive verbs.

Recommended: SMLI 2100.

MnTC Goals: 6, 8.

SPAN-Spanish

SPAN 1100 Beginning Spanish 1

5 cr

This course introduces critical differences and similarities between Spanish and English while students develop competency in speaking, listening, reading, and writing. Aspects of Hispanic culture are also frequently introduced in class, which help students develop cultural sensitivity toward the Spanish-speaking world as part of increased global understanding. The entire present tense is covered, including all irregular verbs.

MnTC Goals: 8.

SPAN 1101 Introduction to Interpreting and Translation

Introduction to Interpreting and Translation introduces students to the career competencies, ethics and major theories related to the fields of interpreting and translation. Through readings by experts in the field, case studies, and professional profiles, students will learn about the fields of interpreting and translation and exercise key skills required to work in these professions. Taught in English. Cross-Listed as: CHIN 1101, FREN 1101, GERM 1101, JAPN 1101, INDS 1101.

SPAN 1111 Spanish Culture and Civilization 3 cr

This course acquaints students with aspects of the culture and civilization of the Spanish-speaking peoples. Course topics will be selected from among the areas of the arts, literature, and history to allow students to gain an awareness of cultural, social, religious, and linguistic aspects of the target culture. Students will develop an understanding of the responsibility world citizens share for their common global future by comparing and contrasting their own culture with that of Spanish-speaking peoples. One course taught in English; one course taught in Spanish.

MnTC Goals: 6, 8.

SPAN 1120 Spanish for Educators 1

3 cr

Spanish for Educators 1 is the first of two courses designed for English-speaking educators and future educators who need to acquire vocabulary and develop basic Spanish skills in order to communicate with Spanish-speaking students and their parents on a variety of school-related topics. In addition, the course seeks to provide learners with an understanding of key concepts about Hispanic culture which influence interactions in educational settings. Cross-Listed as: EDUC 1120.

SPAN 1200 Beginning Spanish 2

5 cr

This course is a continuation of the listening, reading, speaking, and writing competencies developed in SPAN 1100. Students further explore cultural differences helping them develop a deeper understanding of the world and a greater cultural perspective. All forms of the preterite and imperfect are covered.

Recommended: SPAN 1100.

MnTC Goals: 8.

SPAN 1220 Spanish for Educators 2

3 cr

Spanish for Educators 2 is the second of two courses designed for English-speaking educators who need to develop basic conversational Spanish skills in order to communicate with Spanish-speaking students and their parents on a wide variety of school-related topics. In this course, students will learn to construct sentences and questions using twelve "high-frequency" structures in Spanish, along with one hundred and twenty verbs relevant to educational settings. Students continue to develop vocabulary related to classroom and school settings. Situational dialogues and role-plays are an important part of this course. Along with developing conversational skills, attention is given to further development of beginning listening, reading and writing skills. Cultural practices and perspectives are presented through the art and literature of the Spanish-speaking peoples. The cultural components in Spanish for Educators II are designed to encourage teachers to use authentic Hispanic art and literature in their own classrooms or school communities to raise awareness and understanding about the cultures of Spanish-speaking peoples in Minnesota and the United

Prerequisite: EDUC 1120. Cross-Listed as: EDUC 1220.

SPAN 2096 Internship in Spanish

2-4 cr

This internship course explores careers and training in a supervised work setting and combines theory with field experience. Students spend approximately 2.5 hours per week, per credit on the job, complete academic work, and meet with faculty throughout the semester. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Spanish and consent of instructor and the Center for Experiential Education.

SPAN 2100 Intermediate Spanish 1

5 cr

Students continue the development and strengthening of the four communication skills: listening, speaking, reading, and writing. Cultural and literary materials are used to develop an appreciation for the arts, history, culture, and literature of Spanish-speaking peoples and create an awareness of cultural, social, and linguistic differences and similarities. Major grammar focus includes a review of the forms and uses of preterit and imperfect; formation and uses of the present subjunctive; and introduction to compound tenses.

Recommended: SPAN 1200.

MnTC Goals: 6, 8.

SPAN 2200 Intermediate Spanish 2

Students continue to develop the four communication skills: listening, speaking, reading, and writing. Increased amounts of literary materials and cultural components are used to develop a broader understanding of and appreciation for the arts, history, politics, and culture of the Spanish-speaking world. Major grammar points include a comprehensive review of uses of the subjunctive (both present and imperfect) compound tenses.

Recommended: SPAN 2100.

MnTC Goals: 6, 8.

SPAN 2210 Advanced Communication Skills

Students continue the development and strengthening of oral and written proficiency acquired in previous courses. This course is strongly recommended for those students who have taken two years of language at the community college level, or who have acquired equivalent knowledge through other courses.

Oral and written assignments may be based on cultural and/or literary materials presented in class. May be taken a second time for credit.

THTR-Theatre

THTR 1101 Voice and Movement

This course introduces students to the fundamental interconnectedness of physical and vocal techniques that provide a basis for a career in the performing arts, as well as other fields in which public speaking and presenting is necessary for success. Theoretical approaches will include the work of both established theories as well as those that are new and emerging in the field. Through daily practice, students will develop a deeper and more personal understanding of their work as performers.

THTR 1111 Introduction to Cinema 3 cr

Explores the development of film from aesthetic, historical, and cultural perspectives. Includes the work of past and present filmmakers in an attempt to analyze and evaluate the changing nature of film in every aspect. In addition, the course asks students to examine the profound personal impact that this medium has had their lives.

MnTC Goals: 6, 7.

THTR 1116 Introduction to Theatre 3 cr

Become an educated spectator and explore the magic of theatre through viewing and reading plays, studying the richness and diversity of drama, and looking critically at the methods and styles of actors, directors, playwrights, and designers.

MnTC Goals: 6.

THTR 1117 Introduction to Television and Digital Media 3 cr

This course explores the role of television and digital media from a variety of perspectives including television's early beginnings through today's digital media industry.

Narrative structure will be explored through comparisons of live theatre and television/digital media. Through the examination and evaluation of different genres, styles, and production processes, students will explore the profound personal impact that television and digital media has in their lives.

MnTC Goals: 6, 7.

3 cr

3 cr

THTR 1118 Theatre in the Twin Cities

3 cr

Students will experience and respond to several theatre productions and encounter a wide variety of styles, genres, and production forms from diverse cultural and ethnic traditions. Analyzes how theatre artists work and how their productions embody the playwright and director's intentions. Students become familiar with the artistic goals and methods of various Twin Cities theatres, and learn how to respond to theatre performance more knowledgeably. There is an additional fee for this course. MnTC Goals: 6, 7.

THTR 1120 Theatre Performance Practicum

1 cr

This credit is earned through performance of a role in a Normandale main stage or faculty-approved theatrical production. Hours vary per week as determined by the rehearsal schedule for the production. Admission is by consent of the instructor and based on acquisition of the role through an audition process. The course may be repeated for a maximum of 4 total credits. Prerequisite: Instructor's permission.

THTR 1122 Technical Theatre Practicum

1 cr

3 cr

The student will earn credit through participation as a construction or run crew member on a Normandale mainstage or faculty-approved theatrical production. Hours vary per week as determined by the build and run schedule for the production. This course may be repeated for a maximum of 4 credits.

THTR 1125 Drawing and Rendering

Introduction to the techniques and process of drafting and drawing for theatrical design including mechanical drawing, computer aided drafting, freehand rendering. This course will provide the skills and fundamental techniques needed in scenic, costume, and lighting design, and provide the foundation for THTR 2020 Basic Design and THTR 1145 Lighting and Sound.

MnTC Goals: 6.

THTR 1130 Costume Construction

Explore the basic theory and practice, the design purpose, tools, and methods of stage costuming to see how it enriches the meaning of the drama. Formulate criteria for interpreting designs and experience practical problemsolving through costume construction techniques for production. Costume shop hours required.

MnTC Goals: 6.

THTR 1135 Stage Makeup

2 cr

Explore the basic theory and practice, the design purpose, tools, and methods of stage makeup to see how it enriches the meaning of the drama. Experience practical problemsolving by executing multiple designs and makeup applications.

THTR 1140 Stagecraft

3 cr

Explore the basic theory and practice, the design purpose, tools, and methods of stagecraft to see how it enriches the meaning of the drama. Formulate criteria for interpreting designs and experience practical problem-solving through stage construction techniques for production. Shop hours required.

MnTC Goals: 6.

THTR 1145 Lighting and Sound

3 cr

The purpose of this course is to provide an introduction to techniques and methods used to realize lighting and sound plots, with particular attention paid to the technical skills required to prepare, set, and run lighting and sound equipment in production.

MnTC Goals: 6.

THTR 1151 Acting 1

3 cr

Physical, vocal and psychological process of acting. Exercises, games and discussion develop individual skills in the beginning actor/actress.

MnTC Goals: 6.

THTR 1900 Topics in Theatre Studies

3 cr

Includes specialized courses that offer students the opportunity to explore areas of theatre and film through more in-depth study. Topics courses do not satisfy goals of the Minnesota Transfer Curriculum.

Prerequisite: Topic-dependent.

THTR 2020 Basic Design

3 cr

Introduction to the concepts, process, and practices common to the design of scenery, costume, and lighting. The study and application of the aesthetic principles and graphic skills involved in all areas of theatrical design. Development of the student's abilities in research methodology, mechanical drawing, freehand sketching and rendering as it applies to design for the theatre. Emphasis on design skills as a communication tool in the collaborative process of theatrical production.

MnTC Goals: 6.

THTR 2096 Internship in Theatre

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Theatre and consent of instructor and the Center for Experiential Education.

THTR 2111 World Cinema

3 cr

This course explores influential and contemporary world films, movements, and filmmakers. Film aesthetics and dramatic elements will be discussed in terms of national identity, culture, and globalization. To appreciate how film can shape your understanding of the world, students will consider the historical, cultural, and socio-political circumstances of several global films.

Prerequisite: THTR 1111. MnTC Goals: 6, 8.

THTR 2150 Script Analysis

3 cr

Focus on analyzing play scripts with a view to discovering production and performance values and aesthetics. Intensive reading of a variety of plays from different periods and styles. Discussion of options for interpreting a script for performance. Critical analysis of structure, character, theme, dialogue, genre, and style, from the point of view of the actor, director, designer, or critic.

MnTC Goals: 6.

THTR 2151 Acting 2

3 cr

This class provides further exploration into the art of acting. Students will focus on physical and vocal technique, challenging scene work, increased emotional availability in characters, complex text and character analysis, and the collaborative rehearsal process. Prerequisite: THTR 1151.

MnTC Goals: 6.

THTR 2160 Audition Techniques

3 с

Prepares the student in the techniques, opportunities, and procedures of auditioning, interviewing, and constructing resumes for advanced study or career placement. Students will develop a repertoire of audition pieces to increase their ability to perform with confidence on short notice.

Prerequisite: THTR 1151.

MnTC Goals: 6.

THTR 2170 Musical Theatre Performance

This course will teach students to build on basic acting technique through the styles and constructs of musical theatre and song. Students will learn to appreciate and understand the basic techniques and functions of acting, singing, and dance within the genre, and to hone their skills in resourcing and preparing musical theatre pieces that serve their individual artistry. Students who complete this course will obtain a basic understanding of vocal care and technique, and the professional, artistic, and physical skills required of the musical theatre actor. Students will examine and prepare a range of musical theatre pieces from the 1920s to contemporary repertoire, crafting a series of well-honed audition and performance pieces.

Prerequisite: THTR 1151.

MnTC Goals: 6.

THTR 2520 Stage Management

3 cr

Explore the basic theory and practice, purpose, tools, and methods of stage management to demonstrate the vital role these personnel play in a theatrical production. Create the necessary paperwork required to effectively manage a production. Simulate real world situations in a classroom setting to better prepare the student for real world applications.

MnTC Goals: 6.

THTR 2550 Directing 1

3 cr

This course focuses on the art of play direction. Students will learn the fundamentals of interpretation, blocking and picturization, collaboration and communication, focus and composition, pace, rhythm, and tempo. The role and process of the director will be examined.

Prerequisite: THTR 1151.

MnTC Goals: 6.

VACT-Vacuum Technology

VACT 1010 Foundations of Vacuum Science

2 cr

Basic principles of chemistry, math, and physics are applied to the understanding of concepts needed to continue in courses of vacuum technology. Topics include atomic structure, states of matter, compounds, behavior of gases, scientific measurement and calculations, intermolecular forces, and Ohm's Law.

Recommended: Eligible for MATH 0601.

VACT 1292 Introduction to Vacuum Technology

2 cr

Vacuum-based systems are a critical enabling technology used in product development and manufacturing to produce many every-day goods such as digital electronic components, energy efficient glass, and metallised films used for food packaging. This course introduces the principal concepts associated with vacuum technology and the critical components of a vacuum system. Students work with a model vacuum system to complete activities intended to help them understand basic vacuum system functions and characteristic.

Recommended: MATH 0700 or concurrent registration or eligible for MATH 1100 eligible for ENGC 1101. Cross-Listed as: NANO 1292.

VACT 2096 Internship in Vacuum Technology

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.

Prerequisite: Previous coursework in Vacuum Technology and consent of instructor and the Center for Experiential Education.

VACT 2293 Vacuum Analysis and Troubleshooting 4 cr

This course addresses advanced concepts related to the construction, operation, maintenance, and repair of vacuum-based systems technologies. An understanding of how materials, mechanical systems, and electrical subsystems interact in a working vacuum system based on operating requirements is developed. Students work with a model vacuum system to complete a variety of lab activities intended to help them understand vacuum system operation and then simulate classic system problems and solutions.

Prerequisite: VACT 1292 or NANO 1292, ENGT 1153 or concurrent registration ENGT 1184 or concurrent registration CHEM 1020 (B or higher) or CHEM 1061, PHYS 1110 or concurrent registration. Cross-Listed as: NANO 2293.

VACT 2294 Semiconductor Processing

4 cr

Semiconductor processing refers to categories of manufacturing processes associated with fabricating an integrated circuit, a type of electrical component manufactured by the semiconductor industry. This course provides an overview explaining these special processes and how they are sequenced to produce the integrated circuit. Vacuum systems technology plays a critical role in making several of the underlying fabrication processes possible.

Prerequisite: VACT 2297 or NANO 2297 or concurrent

registration. Cross-Listed as: NANO 2294.

VACT 2297 Thin Film Deposition

3 cr

Thin film deposition refers to techniques used to deposit layers of material on a surface ranging in layer thickness of a few nanometers (1 x 10-9 m) up to a thickness of 1 micrometer (1x10-6 m). This course provides an overview of the methods and the embedded vacuum-based technologies used to realize various material deposition processes. Students set up and run processes such as vacuum evaporation and sputtering to create a thin film and then examine characteristics of the layer produced. Prerequisite: VACT 2293 or NANO 2293. Cross-Listed as: NANO 2297.

WMST - Women's Studies

WMST 1120 Introduction to Women's and Gender Studies 3 cr

This course investigates the evolving position of women in society and the role of gender in shaping opportunities and experiences. Through various cultural and theoretical perspectives, students analyze how women's rights and roles change and how gender influences power, status and meaning.

Cross-Listed as: ANTH 1120 and SOC 1120.

MnTC Goals: 5, 9.

WMST 1121 Women Across Cultures

3 cr

This course focuses on the major institutions of family, education, economic, and political systems as they define, provide for, and frequently limit women. The course addresses women's issues throughout many cultures of the world and considers how women's gender intersects with race, religion, and sexual orientation. Cross-Listed as: ANTH 1121 and SOC 1121.

MnTC Goals: 5, 8.

WMST 2096 Internship in Women's Studies

2-4 cr

This internship course explores careers and training in a supervised work setting. Combines theory with field experience. Students spend approximately 2.5 hours per week per credit on the job, complete academic work and meet with faculty. Students may earn 2 to 4 credits per semester, with a maximum of 8 credits in any one discipline.