



Welcome to Central Lakes College.

We are here to help you build your future.

We have over 70 programs designed to help students attain the necessary skills required for a job in a chosen career field or to transfer to a four-year college or university for further study. We also provide opportunities for individuals to update skills while on the job.

You will find your classes challenging, your instructors experts in their fields, the labs equipped with the technology of today, and online learning options that enhance your courses or allow you to learn anytime and anywhere.

There are many events and activities that take place throughout the year. Our clubs and organizations provide you with opportunities to connect with others with similar interests. You can cheer our award-winning sports teams. Our theater productions and concerts provide opportunities for you to perform or be entertained. Expand your horizons by listening to thought-provoking speakers, attending festivals, or explore other cultures through the travel abroad program.

Finally, the college provides a vast array of student services to support your learning. The staff is ready to help answer your financial aid questions, assist you with selecting a career or major, provide support to deal with personal issues, and assist you with your class assignments.

Central Lakes College is a dynamic institution that is focused on your future. The college provides learning opportunities for students of any age.

We invite you to make Central Lakes College the first stop as you build your future.

Dr. Larry Lundblad, President
Central Lakes College

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MN State Colleges & Universities Office of the General Counsel

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Associate in Arts Degree

An Associate in Arts (A.A.) degree may be awarded upon successful completion of a 60 credit program in the liberal arts and sciences curriculum designed to constitute the first two years of a baccalaureate degree. An A.A. degree requires the completion of at least a 40 credit general education curriculum that fulfills the Minnesota Transfer Curriculum goal areas.

Associate in Science Degree

An Associate in Science (A.S.) degree may be awarded upon successful completion of a 60 to 64 credit program in a designated field or area which transfers to a baccalaureate major in a related scientific, technological, or other non-liberal arts professional field. An A.S. degree must have one or more articulation agreement(s) between the institution awarding the A.S. degree and the institution awarding a related baccalaureate degree. An A.S. degree shall include a minimum of 30 semester credits in general education selected from at least six of the ten goal areas of the Minnesota Transfer Curriculum. An A.S. degree may also be designed to prepare students for employment.

Associate in Fine Arts Degree

An Associate in Fine Arts (A.F.A.) degree may be awarded upon successful completion of a 60 credit program in a designated discipline in fine arts. An A.F.A. degree is designed for transfer to a baccalaureate degree, as specified in an articulation agreement between the partnering institutions. An A.F.A. degree offered by a college must have at least one articulation agreement between the institution awarding the degree and an institution awarding a baccalaureate degree in a related fine arts discipline. An A.F.A. degree shall include a minimum of 24 semester credits in general education selected from at least six of the ten goal areas of the Minnesota Transfer Curriculum.

Associate in Applied Science Degree

An Associate in Applied Science (A.A.S.) degree may be awarded upon successful completion of a 60 to 72 credit program. An A.A.S. degree is intended to prepare students for employment or may be designed to transfer to a related baccalaureate major. An A.A.S. degree shall include 25 percent of the total semester credits in general education credits. General education courses shall be selected from at least three of the ten goal areas of the Minnesota Transfer Curriculum.

Diploma

A diploma may be awarded upon successful completion of a 30 to 72 credit program. A diploma is intended to provide students with employment skills.

Certificate

A certificate may be awarded upon successful completion of a 9 to 30 credit specialized program of study.

ACADEMIC AND CAREER MAJORS

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Liberal Arts and Sciences Associate in Arts Degree Four-Year College Transfer

An Associate in Arts Degree earned at Central Lakes College is recommended as the transfer degree that enables a student to transfer to a Minnesota four-year college or university. Through special agreements, the A.A. Degree, in most cases, allows a student to continue with a “junior status” at the selected state university.

Included in the Associate in Arts Degree is the MINNESOTA GENERAL EDUCATION TRANSFER CURRICULUM which contains the minimum number of credits (40) needed to complete general education requirements at all public colleges and universities in the state of Minnesota.

These requirements apply to new students, and students who have been absent from this college one academic year or longer.

- At least one semester before you plan to graduate, you must officially “Apply to Graduate.”
- 20 credits must be earned at Central Lakes College to be eligible for an Associate in Arts Degree.
- A total of 60 college level credits are required for an Associate in Arts Degree.
- Classes may meet requirements for more than one goal area, but credit will not be awarded for any course twice.

Central Lakes College 2012-13 Minnesota Transfer Curriculum

Central Lakes College’s version of the Minnesota General Education Transfer Curriculum is a 40-credit course cluster designed to transfer by formal agreement to all Minnesota public colleges and universities where it will meet all lower division general education requirements. A 2.0 MnTC GPA is required for recognition of a student’s completion of the entire Minnesota Transfer Curriculum. It is certified by the faculty of CLC as meeting the goals and student competencies for general

education agreed to by the faculties and official administrative representatives of all Minnesota public higher education systems.

CLC’s transfer curriculum, like similar curricula in all public colleges and universities in the State of Minnesota, is designed to provide students with a broad liberal arts and sciences foundation integrated with communications and thinking skills, and a study of contemporary concerns – all essential to serving an individual student’s lifetime personal, social, and career needs. This curriculum recognizes that knowledge of the liberal arts and sciences, by its universality and timelessness, equips students to transcend individual differences and the inevitable changes affecting life in the 21st century.

This curriculum identifies the knowledge and skills people need to participate successfully in a complex and changing world. Its courses emphasize our common membership in the human community; our personal need for intellectual fulfillment achieved through lifelong learning, and our daily involvement in a diverse world. Courses emphasize diverse ways of knowing, factual content, theories and models, and the creative modes of a broad spectrum of disciplines and interdisciplinary fields. Emphasized equally are the basic skills of discovery, integration, application, and communication.

Goal Area 1 Written & Oral Communication (9-11 credits minimum)

To develop writers and speakers who use the English language effectively and who read, write, speak and listen critically. As a base, all students should complete introductory communication requirements early in their collegiate studies. Writing competency is an ongoing process to be reinforced through writing-intensive courses and writing across the curriculum. Speaking and listening skills need reinforcement through multiple opportunities for interpersonal communication, public speaking, and discussion.

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Students will be able to:

- Locate, evaluate, and synthesize in a responsible manner material from diverse sources and points of view.
- Select appropriate communication choices for specific audiences.
- Construct logical and coherent arguments.
- Use authority, point-of-view, and individual voice and style in their writing and speaking.
- Employ syntax and usage appropriate to academic disciplines and the professional world.
- Understand/demonstrate the writing and speaking processes through invention, organization, drafting, revision, editing and presentation.
- Participate effectively in groups with emphasis on listening, critical and reflective thinking, and responding.

ENGL 1410	Composition I	(4 cr) [Goal 1]
ENGL 1411	Composition II	(4 cr) [Goal 1]
ENGL 1421	Honors Composition II: Public and Professional Writing	(4 cr) [Goal 1,9]
ENGL 1422	Practical Writing	(3 cr) [Goal 1,2]
SPCH 1410	Introduction to Communication Studies	(3 cr) [Goal 1]
SPCH 1421	Interpersonal Communication	(3 cr) [Goal 1]
SPCH 1431	Fundamentals of Public Speaking	(3 cr) [Goal 1]
SPCH 1464	Creative Communication	(3 cr) [Goal 1]
SPCH 1470	Blogging & Vlogging	(3 cr) [Goal 1,2]
SPCH 1472	Online Social Networking	(3 cr) [Goal 1]
SPCH 2421	Intercultural Communication	(3 cr) [Goal 1,7]
SPCH 2431	Small Group Communication	(3 cr) [Goal 1]
THTR 1432	Digital Storytelling: Stories of You & Yours	(3 cr) [Goal 1,6]
THTR 1441	Oral Interpretation of Literature	(3 cr) [Goal 1]
THTR 1461	Acting I	(3 cr) [Goal 1]

Goal Area 2

Critical Thinking (1 course)

To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought. Critical thinking will be taught and used throughout the general education curriculum in order to develop stu-

dents' awareness of their own thinking and problem-solving procedures. To integrate new skills into their customary ways of thinking, students must be actively engaged in practicing thinking skills and applying them to open-ended problems.

Students will be able to:

- Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.
- Imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems.
- Analyze the logical connections among the facts, goals, and implicit assumptions relevant to a problem or claim; generate and evaluate implications that follow from them.
- Recognize and articulate the value assumptions which underlie and affect decisions, interpretations, analyses, and evaluations made by ourselves and others.

ENGL 1422	Practical Writing	(3 cr) [Goal 1,2]
ENGL 2450	World Literature	(3 cr) [Goal 2,8]
MATH 1461	Honors Introduction to Statistics	(4 cr) [Goal 2,4]
PHIL 1417	Immortality and the Afterlife	(3 cr) [Goal 2,6]
PHIL 1421	Critical Thinking	(3 cr) [Goal 2,9]
PHIL 1460	Logic	(3 cr) [Goal 2,4]
PHIL 2410	Introduction to Philosophy	(3 cr) [Goal 2,6]
PSYC 2421	General Psychology	(4 cr) [Goal 2,5]
PSYC 2423	Honors General Psychology	(4 cr) [Goal 2,5]
READ 1401	College Reading	(3 cr) [Goal 2]
SPCH 1450	Introduction to Mass Communication	(3 cr) [Goal 2,9]
SPCH 1451	Argumentation and Debate	(3 cr) [Goal 2]
SPCH 1470	Blogging and Vlogging	(3 cr) [Goal 1,2]
THTR 1455	Script Analysis	(3 cr) [Goal 2,6]

Goal Area 3

Natural Sciences (6 credits minimum)

To improve students' understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenom-

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ena. As a basis for lifelong learning, students need to know the vocabulary of science and to realize that while a set of principles has been developed through the work of previous scientists, ongoing scientific inquiry and new knowledge will bring changes in some of the ways scientists view the world. By studying the problems that engage today's scientists, students learn to appreciate the importance of science in their lives and to understand the value of a scientific perspective. Students should be encouraged to study both the biological and physical sciences.

Students will be able to:

- Demonstrate understanding of scientific theories.
- Communicate their experimental findings, analyses, and interpretations both orally and in writing.
- Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.
- Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.

BIOL 1404	Human Biology (3 cr) [Goal 3]
BIOL 1411	Concepts of Biology (3 cr) [Goal 3]
BIOL 1415	Environmental Biology (3 cr) [Goal 3,10]
BIOL 1431	General Biology I (5 cr) [Goal 3]
BIOL 1432	General Biology II (5 cr) [Goal 3,10]
BIOL 2401	Nutrition (2 cr) [Goal 3]
BIOL 2411	Biology of Women (3 cr) [Goal 3]
BIOL 2415	General Ecology (4 cr) [Goal 3,10]
BIOL 2457	Microbiology (4 cr) [Goal 3]
BIOL 2467	Anatomy & Physiology I . . (4 cr) [Goal 3]
BIOL 2468	Anatomy & Physiology II (4 cr) [Goal 3]
CHEM 1405	Life Science Chemistry . . (3 cr) [Goal 3]
CHEM 1406	Life Science Chemistry Lab (1 cr) [Goal 3]
CHEM 1410	Environmental Chemistry (3 cr) [Goal 3,10]
CHEM 1414	Fundamentals of Chemistry (4 cr) [Goal 3]
CHEM 1424	Chemical Principles I (5 cr) [Goal 3]

CHEM 1425	Chemical Principles II (5 cr) [Goal 3]
CHEM 2472	Organic Chemistry I (5 cr) [Goal 3]
CHEM 2473	Organic Chemistry II (5 cr) [Goal 3]
ENGR 1411	Engineering Physics I (5 cr) [Goal 3]
ENGR 1412	Engineering Physics II . . . (5 cr) [Goal 3]
ESCI 1400	Geology of National Parks (3 cr) [Goal 3,10]
ESCI 1405	Astronomy (4 cr) [Goal 3]
ESCI 1411	Physical Geology (4 cr) [Goal 3]
ESCI 1421	Minnesota Geology (3 cr) [Goal 3]
ESCI 1444	Natural Disasters (3 cr) [Goal 3,10]
ESCI 1451	Oceanography (3 cr) [Goal 3,10]
ESCI 1452	Oceanography Lab (1 cr) [Goal 3,10]
ESCI 1454	Earth Science and the Environment (4 cr) [Goal 3,10]
ESCI 1455	Honors Earth Science and the Environment . . (4cr) [Goal 3,10]
ESCI 1457	Honors Oceanography (3 cr) [Goal 3,10]
PHYS 1401	College Physics I (4 cr) [Goal 3]
PHYS 1402	College Physics II (4 cr) [Goal 3]
PHYS 1430	Concepts of Physics: A Universe of Hidden Charm (3 cr) [Goal 3]

Goal Area 4 Mathematical/ Logical Reasoning (3 credits minimum)

To increase students' knowledge about mathematical and logical modes of thinking. This will enable students to appreciate the breadth of applications of mathematics, evaluate arguments, and detect fallacious reasoning. Students will learn to apply mathematics, logic, and/or statistics to help them make decisions in their lives and careers. Minnesota's public higher education systems have agreed that developmental mathematics includes the first three years of a high school mathematics sequence through intermediate algebra.

Students will be able to:

- Illustrate historical and contemporary applications of mathematics/logical systems.
- Clearly express mathematical/logical ideas in writing.
- Explain what constitutes a valid mathematical/logical argument (proof).
- Apply higher-order problem-solving and/or modeling strategies.

MATH 1441	Concepts in Mathematics (3 cr) [Goal 4]
MATH 1460	Intro to Statistics (4 cr) [Goal 4]
MATH 1461	Honors Introduction to Statistics (4 cr) [Goal 2,4]
MATH 1470	College Algebra (3 cr) [Goal 4]

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MATH 1472	Precalculus (5 cr) [Goal 4]
MATH 1477	Calculus I (5 cr) [Goal 4]
MATH 1478	Calculus II (5 cr) [Goal 4]
MATH 2457	Linear Algebra (3 cr) [Goal 4]
MATH 2458	Multivariable Calculus . . . (4 cr) [Goal 4]
MATH 2459	Differential Equations . . . (4 cr) [Goal 4]
PHIL 1460	Logic (3 cr) [Goal 2,4]

Goal Area 5**History and the Social and Behavioral Sciences (9 credits minimum)**

To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity.

Students will be able to:

- Employ the methods and data that historians and social and behavioral scientists use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods and cultures.
- Use and critique alternative explanatory systems or theories.
- Develop and communicate alternative explanations or solutions for contemporary social issues.

AMST 1400	Introduction to Women's Studies (3 cr) [Goal 5,7]
AMST 2420	Women & Religion (3 cr) [Goal 5,7]
ANTH 1457	Cultural Anthropology . . (3 cr) [Goal 5,8]
ANTH 2411	Cultures of American Indians (3 cr) [Goal 5,7]
ANTH 2425	Cultures of Latin America (3 cr) [Goal 5,8]
ECON 1450	The American Economy . . (3 cr) [Goal 5]
ECON 2401	Principles of Economics- Macroeconomics (3 cr) [Goal 5]
ECON 2402	Principles of Economics- Microeconomics (3 cr) [Goal 5]
ENVR 1400	Introduction to Environmental Studies (3 cr) [Goal 5,10]
GEOG 1400	Physical Geography . . . (3 cr) [Goal 5,10]
GEOG 1410	Maps and Places (3 cr) [Goal 5]
GEOG 1421	World Regional Geography (3 cr) [Goal 5,8]
GEOG 1459	Cultural Geography . . . (3 cr) [Goal 5,8]
GEOG 1460	Honors Cultural Geography (3 cr) [Goal 5,8]

GLST 1401	Introduction to Global Studies (3 cr) 5,8
HIST 1406	Western Civilization, Pre-History to 1500 (3 cr) [Goal 5]
HIST 1407	Western Civilization, 1500 to Present (3 cr) [Goal 5]
HIST 1412	World History I, From the Beginning to 1500 (3 cr) [Goal 5,8]
HIST 1413	World History II, 1500 to Present (3 cr) [Goal 5,8]
HIST 1472	U.S. History to 1865 (3 cr) [Goal 5,7]
HIST 1473	U.S. History Since 1865 . (3 cr) [Goal 5,7]
HIST 1475	Honors U.S. History 1865 to Present (3 cr) [Goal 5,7]
HIST 2404	Minnesota History (3 cr) [Goal 5]
HIST 2411	American Indian History (3 cr) [Goal 5,7]
HIST 2420	History of Women in the U.S. (3 cr) [Goal 5,7]
POLS 1430	Introduction to Political Science (3 cr) [Goal 5,9]
POLS 1435	American Government and Politics (3 cr) [Goal 5,9]
POLS 1439	State and Local Government (3 cr) [Goal 5,9]
POLS 1440	Society and Law (3 cr) [Goal 5,9]
POLS 2401	Federal Indian Policy . . . (3 cr) [Goal 5]
POLS 2402	Tribal Government (3 cr) [Goal 5,9]
POLS 2450	International Relations . (3 cr) [Goal 5,8]
PSYC 1411	Personal Growth & Behavior (3 cr) [Goal 5]
PSYC 1420	Psychology & Modern Life (3 cr) [Goal 5,9]
PSYC 2421	General Psychology . . . (4 cr) [Goal 2,5]
PSYC 2423	Honors General Psychology (4 cr) [Goal 2,5]
PSYC 2425	Conflict, Trauma and Post Traumatic Stress Disorder (3 cr) [Goal 5,7]
PSYC 2431	Human Development . . . (3 cr) [Goal 5]
PSYC 2435	Educational Psychology (3 cr) [Goal 5,7]
PSYC 2470	Abnormal Psychology . . (3 cr) [Goal 5,7]
SOCL 1401	Introduction to Sociology (3 cr) [Goal 5]
SOCL 1403	Honors Introduction to Sociology (3 cr) [Goal 5,8]
SOCL 1472	Sociology of the Family . . (3 cr) [Goal 5]
SOCL 2405	Criminology (3 cr) [Goal 5]
SOCL 2411	Social Problems (3 cr) [Goal 5,9]
SOCL 2422	Culture & Environment (3 cr) [Goal 5,10]
SOCL 2480	Sociology of Death and Dying (3 cr) [Goal 5]
SOCL 2481	Race, Ethnicity & Oppression (3 cr) [Goal 5,7]
THTR 2450	Theatre History (3 cr) [Goal 5,8]

Goal Area 6**Humanities and Fine Arts (9 credits minimum)**

To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature, philosophy, and the fine arts,

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students will engage in critical analysis, form aesthetic judgments, and develop an appreciation of the arts and humanities as fundamental to the health and survival of any society. Students should have experiences in both the arts and humanities.

Students will be able to:

- Respond critically to works in the arts and humanities.
- Engage in the creative process or interpretive performance.
- Articulate an informed personal reaction to works in the arts and humanities.
- Demonstrate awareness of the scope and variety of works in the arts and humanities.
- Understand those works as expressions of individual and human values within an historical and social context.

AMSL 2420	Deaf Culture	(3 cr) [Goal 6,7]
AMST 2402	Gender and Popular Culture	(3 cr) [Goal 6,7]
ARTS 1401	Black & White Photo I	(3 cr) [Goal 6]
ARTS 1403	Color Photo I	(3 cr) [Goal 6]
ARTS 1420	The Art of Digital Photography	(3 cr) [Goal 6]
ARTS 1458	Drawing	(3 cr) [Goal 6]
ARTS 1459	2-D Design & Color	(3 cr) [Goal 6]
ARTS 1467	Watercolor Painting	(3 cr) [Goal 6]
ARTS 1468	Painting	(3 cr) [Goal 6]
ARTS 1470	Art Appreciation	(3 cr) [Goal 6]
ARTS 1487	Ceramics: Beginning Hand Building	(3 cr) [Goal 6]
ARTS 1488	Ceramics: Beginning Throwing	(3 cr) [Goal 6]
ARTS 1489	Intermediate Ceramics	(3 cr) [Goal 6]
ARTS 2401	Black & White Photo II	(3 cr) [Goal 6]
ARTS 2403	Color Photo II	(3 cr) 6 [Goal]
ARTS 2485	American Indian Art	(3 cr) [Goal 6,7]
ARTS 2486	Art History/Ancient	(3 cr) [Goal 6]
ARTS 2487	Art History/Modern	(3 cr) [Goal 6]
ARTS 2490	Art History/Non-Western	(3 cr) [Goal 6,8]
ENGL 1450	Introduction to Humanities	(3 cr) [Goal 6,8]
ENGL 1452	Classical Mythology	(3 cr) [Goal 6]
ENGL 1454	Film Appreciation	(3 cr) [Goal 6]
ENGL 1460	Honors Literature: The Great Books	(3 cr) [Goal 6]
ENGL 1463	Introduction to Literature	(3 cr) [Goal 6,7]
ENGL 1468	Poetry	(3 cr) [Goal 6]
ENGL 1469	American Short Story	(3 cr) [Goal 6]
ENGL 1477	Authors in Focus	(1-3 cr) [Goal 6]
ENGL 1478	Authors in Focus	(1-3 cr) [Goal 6]
ENGL 2451	Women in Literature	(3 cr) [Goal 6]

ENGL 2455	American Indian Literature	(3 cr) [Goal 6,7]
ENGL 2457	British Literature Pre-1800	(3 cr) [Goal 6]
ENGL 2458	British Literature 1800-Present	(3 cr) [Goal 6]
ENGL 2467	American Literature Pre-1861	(3 cr) [Goal 6,7]
ENGL 2468	American Literature 1861-Present	(3 cr) [Goal 6,7]
ENGL 2470	Creative Nonfiction	(3 cr) [Goal 6]
ENGL 2483	Creative Writing	(3 cr) [Goal 6]
ENGL 2484	Advanced Creative Writing	(3 cr) [Goal 6]
MUSC 1403	American Popular Music	(3 cr) [Goal 6]
MUSC 1405	Jazz Band I	(1 cr) [Goal 6]
MUSC 1406	Jazz Band II	(1 cr) [Goal 6]
MUSC 1408	Community Band I	(1 cr) [Goal 6]
MUSC 1409	Community Band II	(1 cr) [Goal 6]
MUSC 1415	Brass Ensemble I	(1 cr) [Goal 6]
MUSC 1416	Brass Ensemble II	(1 cr) [Goal 6]
MUSC 1421	Cantare' Concert Chorale I	(1 cr) [Goal 6]
MUSC 1422	Cantare' Concert Chorale II	(1 cr) [Goal 6]
MUSC 1431	Chamber Singers I	(1 cr) [Goal 6]
MUSC 1432	Chamber Singers II	(1 cr) [Goal 6]
MUSC 1441	Applied Music - Guitar I	(1 cr) [Goal 6]
MUSC 1442	Applied Music - Guitar II	(1 cr) [Goal 6]
MUSC 1450	Music in World Cultures	(3 cr) [Goal 6,8]
MUSC 1452	Intro to Music Industry	(3 cr) [Goal 6,9]
MUSC 1453	Audio Recording I	(3 cr) [Goal 6]
MUSC 1455	Voice Training	(2 cr) [Goal 6]
MUSC 1457	Music Appreciation	(3 cr) [Goal 6]
MUSC 1459	Fundamentals of Music	(3 cr) [Goal 6]
MUSC 1464	Applied Music - Brass I	(1 cr) [Goal 6]
MUSC 1465	Applied Music - Brass II	(1 cr) [Goal 6]
MUSC 1475	Applied Music - Woodwind I	(1 cr) [Goal 6]
MUSC 1476	Applied Music - Woodwind II	(1 cr) [Goal 6]
MUSC 1481	Applied Music - Piano I	(1 cr) [Goal 6]
MUSC 1482	Applied Music - Piano II	(1 cr) [Goal 6]
MUSC 1485	Applied Music - Instrumental I	(1 cr) [Goal 6]
MUSC 1486	Applied Music - Instrumental II	(1 cr) [Goal 6]
MUSC 1491	Applied Music - Voice I	(1 cr) [Goal 6]
MUSC 1492	Applied Music - Voice II	(1 cr) [Goal 6]
MUSC 2401	Evolution of Jazz	(3 cr) [Goal 6,7]
MUSC 2405	Jazz Band III	(1 cr) [Goal 6]
MUSC 2406	Jazz Band IV	(1 cr) [Goal 6]
MUSC 2408	Community Band III	(1 cr) [Goal 6]
MUSC 2409	Community Band IV	(1 cr) [Goal 6]
MUSC 2415	Brass Ensemble III	(1 cr) [Goal 6]
MUSC 2416	Brass Ensemble IV	(1 cr) [Goal 6]
MUSC 2421	Cantare' Concert Chorale III	(1 cr) [Goal 6]
MUSC 2422	Cantare' Concert Chorale IV	(1 cr) [Goal 6]
MUSC 2423	Cantare' Concert Chorale V	(1 cr) [Goal 6]
MUSC 2424	Cantare' Concert Chorale VI	(1 cr) [Goal 6]
MUSC 2431	Chamber Singers III	(1 cr) [Goal 6]
MUSC 2432	Chamber Singers IV	(1 cr) [Goal 6]

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MUSC 2441	Applied Music - Guitar III (1 cr) [Goal 6]	THTR 2480	Theatre for a Diverse Population (3 cr) [Goal 6,7]
MUSC 2442	Applied Music - Guitar IV (1 cr) [Goal 6]	THTR 2491	Theatre Independent Study(1-3 cr) [Goal 6]
MUSC 2464	Applied Music - Brass III . (1 cr) [Goal 6]		
MUSC 2465	Applied Music - Brass IV . (1 cr) [Goal 6]		
MUSC 2475	Applied Music - Woodwind III (1 cr) [Goal 6]		
MUSC 2476	Applied Music - Woodwind IV . . . (1 cr) [Goal 6]		
MUSC 2481	Applied Music - Piano III . (1 cr) [Goal 6]		
MUSC 2482	Applied Music - Piano IV . (1 cr) [Goal 6]		
MUSC 2485	Applied Music - Instrumental III . . (1 cr) [Goal 6]		
MUSC 2486	Applied Music - Instrumental IV . . (1 cr) [Goal 6]		
MUSC 2491	Applied Music - Voice III . (1 cr) [Goal 6]		
MUSC 2492	Applied Music - Voice IV . (1 cr) [Goal 6]		
MUSC 2580	Topics in Music(1-3 cr) [Goal 6]		
PHIL 1411	World Religions (3 cr) [Goal 6,9]		
PHIL 1415	Philosophy and Popular Culture (3 cr) [Goal 6]		
PHIL 1417	Immortality and the Afterlife (3 cr) [Goal 2,6]		
PHIL 2410	Introduction to Philosophy (3 cr) [Goal 2,6]		
PHIL 2420	Ethics (3 cr) [Goal 6,9]		
PHIL 2421	Honors Ethics (3 cr) [Goal 6,9]		
PHIL 2430	Contemporary Moral Problems (3 cr) [Goal 6,9]		
SPAN 2420	Many Faces of Mexico . (3 cr) [Goal 6,8]		
THTR 1430	You Tube is a Stage-- Lights, Curtain, Action . . (3 cr) [Goal 6]		
THTR 1432	Digital Storytelling: Stories of You and Yours (3 cr) [Goal 1,6]		
THTR 1442	Improvisation (3 cr) [Goal 6]		
THTR 1443	Stage to Screen: Plays that Become Movies(3 cr) [Goal 6]		
THTR 1451	Introduction to Theatre (3 cr) [Goal 6,8]		
THTR 1452	Stage Make-up (3 cr) [Goal 6]		
THTR 1453	Theatre Costuming (3 cr) [Goal 6]		
THTR 1455	Script Analysis (3 cr) [Goal 2,6]		
THTR 1462	Acting II (3 cr) [Goal 6]		
THTR 1466	Acting Lab I (1 cr) [Goal 6]		
THTR 1467	Acting Lab II (1 cr) [Goal 6]		
THTR 1471	Theatre Production Lab I (1 cr) [Goal 6]		
THTR 1472	Theatre Production Lab II (1 cr) [Goal 6]		
THTR 1478	Technical Theatre (3 cr) [Goal 6]		
THTR 1480	The Theatre Experience (1-3 cr) [Goal 6]		
THTR 1481	The Theatre Experience-New York . .(1-3 cr) [Goal 6]	AMSL 2420	Deaf Culture (3 cr) [Goal 6,7]
THTR 1482	The Theatre Experience-London . . (1-3 cr) [Goal 6,8]	AMST 1400	Introduction to Women's Studies(3 cr) [Goal 5,7]
THTR 1483	Honors The Theatre Experience (3 cr) [Goal 6,7]	AMST 2402	Gender and Popular Culture(3 cr) [Goal 6,7]
THTR 1496	Summer Theatre Workshop (3 cr) [Goal 6]	AMST 2420	Women & Religion (3 cr) [Goal 5,7]
THTR 2410	Children's Theatre (3 cr) [Goal 6]	ANTH 2411	Cultures of American Indians(3 cr) [Goal 5,7]
THTR 2441	Directing for the Theatre (3 cr) [Goal 6]	ARTS 2485	American Indian Art . . . (3 cr) [Goal 6,7]
THTR 2443	Creative Drama with Children (3 cr) [Goal 6]	ENGL 1463	Introduction to Literature (3 cr) [Goal 6,7]
THTR 2466	Acting Lab III (1 cr) [Goal 6]	ENGL 2455	American Indian Literature (3 cr) [Goal 6,7]
THTR 2467	Acting Lab IV (1 cr) [Goal 6]	ENGL 2467	American Literature Pre-1861 (3 cr) [Goal 6,7]
THTR 2471	Theatre Production Lab III (1 cr) [Goal 6]	ENGL 2468	American Literature 1861-Present(3 cr) [Goal 6,7]
THTR 2472	Theatre Production Lab IV (1 cr) [Goal 6]		

Goal Area 7 Human Diversity (1 course)

To increase students' understanding of individual and group differences (e.g. race, gender, class) and their knowledge of the traditions and values of various groups in the United States. Students should be able to evaluate the United States' historical and contemporary responses to group differences.

Students will be able to:

- Understand the development of and the changing meanings of group identities in the United States' history and culture.
- Demonstrate an awareness of the individual and institutional dynamics of unequal power relations between groups in contemporary society.
- Analyze their own attitudes, behaviors, concepts and beliefs regarding diversity, racism, and bigotry.
- Describe and discuss the experience and contributions (political, social, economic, etc.) of the many groups that shape American society and culture, in particular those groups that have suffered discrimination and exclusion.
- Demonstrate communication skills necessary for living and working effectively in a society with great population diversity.

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HIST 1472	U.S. History to 1865 (3 cr) [Goal 5,7]		
HIST 1473	U.S. History Since 1865 .(3 cr) [Goal 5,7]		
HIST 1475	Honors U.S. History 1865 to Present(3 cr) [Goal 5,7]	ARTS 2490	America (3 cr) [Goal 5,8] Art History/ Non-Western (3 cr) [Goal 6,8]
HIST 2411	American Indian History (3 cr) [Goal 5,7]	ENGL 1450	Introduction to Humanities (3 cr) [Goal 6,8]
HIST 2420	History of Women in the U.S. (3 cr) [Goal 5,7]	ENGL 2450	World Literature (3 cr) [Goal 2,8]
MUSC 2401	Evolution of Jazz(3 cr) [Goal 6,7]	GEOG 1421	World Regional Geography (3 cr) [Goal 5,8]
PSYC 2425	Conflict, Trauma and Post Traumatic Stress Disorder (3 cr) [Goal 5,7]	GEOG 1459	Cultural Geography (3 cr) [Goal 5,8]
PSYC 2435	Educational Psychology (3 cr) [Goal 5,7]	GEOG 1460	Honors Cultural Geography . . . (3 cr) [Goal 5,8]
PSYC 2470	Abnormal Psychology . .(3 cr) [Goal 5,7]	GERM 1401	Beginning German I (4 cr) [Goal 8]
SOCL 2481	Race, Ethnicity & Oppression (3 cr) [Goal 5,7]	GERM 1402	Beginning German II (4 cr) [Goal 8]
SPCH 2421	Intercultural Communication (3 cr) [Goal 1,7]	GERM 2401	Intermediate German I . . . (4 cr) [Goal 8]
THTR 1483	Honors The Theatre Experience (3 cr) [Goal 6,7]	GERM 2402	Intermediate German II . . (4 cr) [Goal 8]
THTR 2480	Theatre for a Diverse Population (3 cr) [Goal 6,7]	GLST 1401	Introduction to Global Studies(3 cr) [Goal 5,8]
		HIST 1412	World History I, From the Beginning to 1500 .(3 cr) [Goal 5,8]
		HIST 1413	World History II, 1500 to Present (3 cr) [Goal 5,8]
		MUSC 1450	Music in World Cultures (3 cr) [Goal 6,8]
		OJIB 1401	Beginning Ojibwe I (4 cr) [Goal 8]
		OJIB 1402	Beginning Ojibwe II (4 cr) [Goal 8]
		OJIB 2401	Intermediate Ojibwe I . . . (4 cr) [Goal 8]
		OJIB 2402	Intermediate Ojibwe II . . . (4 cr) [Goal 8]
		POLS 2450	International Relations .(3 cr) [Goal 5,8]
		SOCL 1403	Honors Introduction to Sociology (3 cr) [Goal 5,8]
		SPAN 1401	Beginning Spanish I (4 cr) [Goal 8]
		SPAN 1402	Beginning Spanish II (4 cr) [Goal 8]
		SPAN 2401	Intermediate Spanish I . . . (4 cr) [Goal 8]
		SPAN 2402	Intermediate Spanish II . . (2 cr) [Goal 8]
		SPAN 2403	Intermediate Spanish: Reading, Writing, Speaking (2 cr) [Goal 8]
		SPAN 2420	Many Faces of Mexico (3 cr) [Goal 6,8]
		SUST 1400	Introduction to Sustainability (3 cr) [Goal 8]
		THTR 1451	Introduction to Theatre (3 cr) [Goal 6,8]
		THTR 1482	The Theatre Experience-London . . (1-3 cr) [Goal 6,8]
		THTR 2450	Theatre History (3 cr) [Goal 5,8]

Goal Area 8 Global Perspective (1 course)

To increase students' understanding of the growing interdependence of nations and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic and political experiences.

Students will be able to:

- Demonstrate knowledge of cultural, social, religious and linguistic differences.
- Describe and analyze political, economic, and cultural elements which influence relations of states and societies in their historical and contemporary dimensions.
- Understand the role of a world citizen and the responsibility world citizens share for their common global future.
- Analyze specific international problems, illustrating the cultural, economic, and political differences that affect their solution.

AMSL 1410	American Sign Language I (4 cr) [Goal 8]
AMSL 1412	American Sign Language II (4 cr) [Goal 8]
AMSL 2410	American Sign Language III (4 cr) [Goal 8]
AMSL 2412	American Sign Language IV (4 cr) [Goal 8]
AMSL 2414	Conversational ASL (1 cr) [Goal 8]
ANTH 1457	Cultural Anthropology .(3 cr) [Goal 5,8]
ANTH 2425	Cultures of Latin

Goal Area 9 Ethical & Civic Responsibility (1 course)

To develop students' capacity to identify, discuss, and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship. While there are diverse views of social justice or the common good in a pluralistic society, students should learn that responsible citizenship requires them to develop skills to understand their own and other's positions, be part of the free exchange of ideas, and function as public-minded citizens.

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Students will be able to:

- Analyze and reflect on the ethical dimensions of legal, social, and scientific issues.
- Recognize the diversity of political motivations and interests of others.
- Identify ways to exercise the rights and responsibilities of citizenship.
- Examine, articulate, and apply their own ethical views.
- Understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues.

ENGL 1421	Honors Composition II: Public and Professional Writing (4 cr) [Goal 1,9]
MUSC 1452	Intro to Music Industry (3 cr) [Goal 6,9]
PHIL 1411	World Religions (3 cr) [Goal 6,9]
PHIL 1421	Critical Thinking (3 cr) [Goal 2,9]
PHIL 2420	Ethics (3 cr) [Goal 6,9]
PHIL 2421	Honors Ethics (3 cr) [Goal 6,9]
PHIL 2430	Contemporary Moral Problems (3 cr) [Goal 6,9]
POLS 1430	Introduction to Political Science (3 cr) [Goal 5,9]
POLS 1435	American Government and Politics (3 cr) [Goal 5,9]
POLS 1439	State and Local Government (3 cr) [Goal 5,9]
POLS 1440	Society and Law (3 cr) [Goal 5,9]
POLS 2402	Tribal Government (3 cr) [Goal 5,9]
PSYC 1420	Psychology & Modern Life (3 cr) [Goal 5,9]
SOCL 2411	Social Problems (3 cr) [Goal 5,9]
SPCH 1450	Introduction to Mass Communication (3 cr) [Goal 2,9]

Goal Area 10 People and the Environment (1 course)

To improve students' understanding of today's complex environmental challenges. Students will examine the interrelatedness of human society and the natural environment. Knowledge of both bio-physical principles and sociocultural systems is the foundation for integrative and critical thinking about environmental issues.

Students will be able to:

- Propose and assess alternative solutions to environmental problems.
- Articulate and defend the actions they would take on various environmental issues.

- Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.
- Discern patterns and interrelationships of bio-physical and socio-cultural systems.
- Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.
- Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions. Propose and assess alternative solutions to environmental problems.

BIOL 1415	Environmental Biology (3 cr) [Goal 3,10]
BIOL 1432	General Biology II (5 cr) [Goal 3,10]
BIOL 2415	General Ecology (4 cr) [Goal 3,10]
CHEM 1410	Environmental Chemistry (3 cr) [Goal 3,10]
ENVR 1400	Introduction to Environmental Studies (3 cr) [Goal 5,10]
ESCI 1400	Geology of National Parks (3 cr) [Goal 3,10]
ESCI 1444	Natural Disasters (3 cr) [Goal 3,10]
ESCI 1451	Oceanography (3 cr) [Goal 3,10]
ESCI 1452	Oceanography Lab (1 cr) [Goal 3,10]
ESCI 1454	Earth Science and the Environment (4 cr) [Goal 3,10]
ESCI 1455	Honors Earth Science and the Environment (4 cr) [Goal 3,10]
ESCI 1457	Honors Oceanography (3 cr) [Goal 3,10]
GEOG 1400	Physical Geography (3 cr) [Goal 5,10]
SOCL 2422	Culture & Environment (3 cr) [Goal 5,10]

Fitness for Life (2 credits)

Students may select from the following health, physical education and underwater diving courses. Two (2) credits for varsity sport participation may be used.

HLTH 1501	Personal Health and Wellness (3 cr)
HLTH 1507	Drug Awareness (3 cr)
HLTH 1510	Intro to Massage (3 cr)
HLTH 1531	Women's Health (3 cr)
HLTH 1541	Human Sexuality (3 cr)
PHED 1502	Circuit Training (2 cr)
PHED 1503	Advanced Circuit Training (1 cr)
PHED 1505	Fitness Walking (2 cr)
PHED 1506	Aerobic Exercise (2 cr)
PHED 1507	Basic Horsemanship (2 cr)
PHED 1508	Bicycling (2 cr)
PHED 1510	Beginning Skiing/Snowboarding (2 cr)
PHED 1511	Advanced Skiing/Snowboarding (2 cr)
PHED 1512	Beginning Yoga (2 cr)
PHED 1513	Aerobic Conditioning (2 cr)
PHED 1514	Cardio Sampler (2 cr)

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PHED 1520	Advanced Yoga	(2 cr)
PHED 1521	Body Conditioning	(2 cr)
PHED 1522	Weight Training	(2 cr)
PHED 1523	Strength Training for Women	(2 cr)
PHED 1524	Recreational Sampler	(2 cr)
PHED 1525	Personal Protection Awareness	(2 cr)
PHED 1530	Beginning Swimming	(1 cr)
PHED 1531	Intermediate & Advanced Swimming	(1 cr)
PHED 1534	Beginning Golf	(2 cr)
PHED 1536	Advanced Golf	(2 cr)
PHED 1541	Bowling	(2 cr)
PHED 1544	Basketball – Coed	(1 cr)
PHED 1553	Power Volleyball	(2 cr)
PHED 1594	Fitness for Life	(2 cr)
PHED 2501- 2517	Varsity Sports	(1 cr)
UWDV 1301	PADI Basic Open Water Diving	(4 cr)

General Electives (18 credits)

Students must complete up to 18 credits of courses at the 1000 level or higher to earn 60 credits required for an Associate in Arts Degree. These credits may be taken at Central Lakes College, transferred from any regionally accredited institution of higher learning, or accepted based upon any approved advanced standing agreement with Central Lakes College.

Online Courses

Central Lakes College offers an array of online college classes available to you 24 hours a day, seven days a week. Online courses are conducted mostly or completely over the Internet. Central Lakes College offers over 50 online courses each semester in various subject areas, including English, Math, Computer Technology, Biology, Art, and more. CLC's online courses allow you to work around your busy schedule. Central Lakes College now offers the Associate in Arts Degree completely online.

Green Associate in Arts Degree

Central Lakes College has dramatically redesigned how classes are scheduled. Students are free to choose to take classes in any mix of these ways, but most should be able to limit the number of days they are required to commute to campus. CLC Students seeking an A.A. Degree are able to set up a flexible schedule in one of three basic ways.

Select:

1. Monday-Wednesday-Friday Classes
2. Tuesday-Thursday Classes
3. Earn Your Degree Online

- Save gas
- Save money
- Reduce your carbon footprint
- Limit the amount of day care needed
- Free up time for work, family and friends

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American Indian Studies Certificate

Students in this program may earn a certificate that will prepare them to enrich their knowledge of the American Indians of the central Minnesota region. The American Indian Studies certificate explores the culture, history, art and literature of the American Indian.

Required Courses

Student must choose 12 credits from the following list:

ANTH 2411	Culture of American Indians	..... (3cr)
ARTS 2485	American Indian Art	..... (3cr)
ENGL 2455	American Indian Literature	..... (3cr)
HIST 2406	Ojibwe History	..... (3cr)
HIST 2411	American Indian History	..... (3cr)
POLS 2401	Federal Indian Policy	..... (3cr)

GRADUATION REQUIREMENT 12 CREDITS

Deaf Studies Certificate

This certificate is appropriate for students who are planning to enter, or are currently employed in, all areas of customer relations, including but not limited to business, education, criminal justice, interpreting or the medical field. Their knowledge of ASL and Deaf culture will help them to be more competitive for jobs as employers strive for diversity in the workplace. Courses may also be used to satisfy Interpreter Training

Program pre-requisite requirements at many institutions.

Required Courses

AMSL 1410	American Sign Language I	..... (4cr)
AMSL 1412	American Sign Language II	..... (4cr)
AMSL 2410	American Sign Language III	..... (4cr)
AMSL 2420	Deaf Culture	..... (3cr)
AMSL 2412	American Sign Language IV	..... (4cr)
OR		
SPCH 2421	Intercultural Communication	..... (3cr)

GRADUATION REQUIREMENT 18 CREDITS

A minimum GPA of 2.0 must be maintained in each of the five courses for receipt of the certificate.

Environmental Studies Certificate

Environmental Studies is the interdisciplinary field of study concerned with problems in the relationship between humanity, society, and the natural environment. Of particular concern is the impact of technology on the natural environment and its implications for human welfare. The basic ideas for Environmental Studies originated in natural sciences such as biology, ecology, physics, and chemistry; social sciences such as sociology, political science, economics, and law; and humanities such as philosophy and history. Accordingly, courses in Environmental Studies are de-

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signed to enrich students' knowledge of biological, physical and social aspects of the environment and their awareness of environment related issues.

Required Courses

Student must choose 15 credits from the following list:

BIOL 1415	Environmental Biology	(3cr)
BIOL 2416	General Ecology	(3cr)
BIOL 2417	General Ecology Lab	(1cr)
CHEM 1410	Environmental Chemistry	(3cr)
ENVR 1400	Intro to Environmental Studies	(3cr)
ESCI 1444	Natural Disasters	(3cr)
ESCI 1451	Oceanography	(3cr)
ESCI 1452	Oceanography Lab	(1cr)
ESCI 1454	Earth Science & the Environment	(4cr)
SOCL 2422	Culture and Environment	(3cr)

GRADUATION REQUIREMENT 15 CREDITS

Latin American Studies Certificate

The certificate in Latin American Studies will prepare graduates to enrich their understanding and appreciation of Latin American culture, communication, language, music, and art. This program is appropriate for citizens in an increasingly diverse society and for individuals entering or currently employed in positions in education, business, criminal justice, and other occupations where an understanding of Hispanic culture enhances their abilities in the workplace. Students will have an opportunity to study the cultural, historical, political, economic, religious, and social realities of Mexico, Central, and South America to gain a better understanding of the Hispanic impact on the United States and the growing Latino population in Minnesota.

Required Courses

ANTH 2425	Cultures of Latin America	(3cr)
SPAN 1402	Beginning Spanish II	(4cr)
SPAN 2401	Intermediate Spanish I	(4cr)
SPAN 2402	Intermediate Spanish II	(2cr)
SPAN 2403	Int. Spanish Reading/ Writing/Speaking	(2cr)
SPAN 2420	Many Faces of Mexico	(3cr)

GRADUATION REQUIREMENT 18 CREDITS

Ojibwe Studies Certificate

Ojibwe Studies focuses on the language, history and culture of the Ojibwe within the context of the American Indian experience. Students in this program may earn a certificate that will prepare them to enrich their knowledge of the Ojibwe people of the central Minnesota region.

Required Courses

HIST 2406	Ojibwe History	(3cr)
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Student must choose 2 courses from the following list:

OJIB 1401	Beginning Ojibwe I	(4cr)
OJIB 1402	Beginning Ojibwe II	(4cr)
OJIB 2401	Intermediate Ojibwe I	(4cr)
OJIB 2402	Intermediate Ojibwe II	(4cr)

Student must choose 3 courses from the following list:

ANTH 2411	Culture of American Indians	(3cr)
ARTS 2485	American Indian Art	(3cr)
ENGL 2455	American Indian Literature	(3cr)
HIST 2411	American Indian History	(3cr)
OJIB 2500	Conversational Ojibwe	(3cr)
POLS 2401	Federal Indian Policy	(3cr)
Any Language course not taken above		(4cr)

GRADUATION REQUIREMENT 20 CREDITS

Women's Studies Certificate

The Women's Studies Certificate will prepare graduates to approach the world with an awareness of women from various ethnic identities, classes and cultures. By understanding the fundamental issues raised in feminist scholarship, graduates will know how to develop effective strategies in order to act as agents of positive change. The curriculum is designed to address the changes taking place in the world today and the impact of those changes on women's lives.

Required Courses

Choose 12 credits from the following list:

AMST 1400	Intro to Women's Studies	(3cr)
AMST 2402	Gender and Popular Culture	(3cr)
AMST 2420	Women and Religion	(3cr)
BIOL 2411	Biology of Women	(3cr)
ENGL 2451	Women in Literature	(3cr)
HLTH 1531	Women's Health	(3cr)
HIST 2420	History of Women in the U.S.	(3cr)

GRADUATION REQUIREMENT 12 CREDITS

HONORS ASSOCIATE IN ARTS DEGREE

Program Description

The Honors Associate of Arts program is for high-achieving students intending to transfer to a four year college or university. Of the 60 credits required for the A.A. degree, 12 will be designated 'Honors' core credits. The honors classes will be rigorous, limited in size, and characterized by a high level of intellectual engagement – coursework will emphasize inquiry, investigation, and analysis. In addition, students will receive leadership training, participate in a service learning activity, and be encouraged to join and participate in the Phi Theta Kappa Academic Honors Society.

Eligibility

Students who score 100 or more on the Reading Accuplacer or have obtained a 24+ composite score on the ACT and have a 3.25 GPA are invited to participate in the Associate in Arts Honors Program. To remain in the program, students must maintain a 3.25 GPA.

Admissions

Those meeting the eligibility standards must complete the application form found on the Central Lakes College website and submit an essay. Applicants completing these steps will be admitted to the program on a first come/first serve basis. The annual cohort limit for the program is 24 students.

Special Program Requirements

CCST 2512: Honors Leadership Development is required - enrolling in this course during a student's sophomore year is recommended. CCST 2510, the one credit service learning component, may be linked to an existing course or independent study.

Career Directions

Lawyer, Engineer, Doctor, Teacher, Politician, International Studies, Graduate Study, Theater Director, Non-profit Executive Director, Entrepreneur...

Transfer Opportunities

Central Lakes College is exploring articulation agreements with area university honors programs to allow for transfer upon gradu-

ation into their honors programs with advanced standing. An Associate in Arts degree earned at Central Lakes College is recommended as the transfer degree that enables a student to transfer to a Minnesota four-year college or university. Through special agreements, the A.A. degree, in most cases, allows a student to continue with a "junior status" at the selected state university. Included in the Honors A.A. degree is the Minnesota General Education Transfer Curriculum which contains the minimum number of credits (40) needed to complete general education requirements at all public colleges and universities in the State of Minnesota.

For more information contact

Admissions Office
218-894-5100 or 800-247-6836
admissions@clcmn.edu

Bob Brekken

History Department - Honors Coordinator
218-855-8190
rbrekken@clcmn.edu

Department Course Offerings

CCST 2510	Honors Service Learning (1cr)
CCST 2512	Honors Leadership Development . . (3cr)
ENGL 1421	Honors Composition II: Public & Prof. Writing (4cr)
ENGL 1460	Honors Literature: The Great Books (3cr)
ESCI 1455	Honors Earth Science and the Environment (4cr)
GEOG 1460	Honors Cultural Geography (3cr)
HIST 1475	Honors U.S. History 1865 to Present (3cr)
MATH 1461	Honors Introduction to Statistics . . (4cr)
PHIL 2421	Honors Ethics (3cr)
PSYC 2423	Honors General Psychology (4cr)
SOCL 1403	Honors Introduction to Sociology . (3cr)
THTR 1483	Honors The Theatre Experience . . . (3cr)



AMERICAN SIGN LANGUAGE

Department Description

American Sign Language is the third most commonly used language in the United States, behind only English and Spanish. Students taking American Sign Language courses will learn grammar, structure, and syntax of this beautiful language. They will have opportunities to interact with people who are deaf and build a strong basis for learning ASL and using it in their future employment.

Special Department Information

Students desiring to learn basic American Sign Language and understand the culture of people who are deaf may elect to complete the 18-credit Deaf Studies Certificate. This program will not prepare students to become interpreters, but covers the basics about ASL and deaf culture.

This certificate is appropriate for students who are planning to enter, or are currently employed in, all areas of customer relations, including but not limited to business, education, criminal justice, interpreting or the medical field. Knowledge of ASL and deaf culture will help them to be more competitive for jobs as employers strive for diversity in the workplace. Students who complete this certificate will be in a position to use basic communication with colleagues or customers who are ASL users. Courses may also be used to satisfy interpreter training program prerequisite requirements at many institutions.

Department Learning Outcomes

Students will be able to:

- Demonstrate appropriate class level oral and expressive World Language skills.
- Demonstrate knowledge and appreciation of cultural values, norms and traditions per specific World Language.
- Demonstrate basic understanding that these differences have an impact on group relationships and interactions.
- Demonstrate appropriate class level receptive and/or written World Language skills.

- Demonstrate appropriate cultural rules of interaction when conversing in the target language.

Transfer Opportunities

The second language skills acquired in ASL courses enhance a student's chance for success in any profession. Students looking beyond a certificate, or considering a future specialization in the field of American Sign Language Interpreting, should know that many institutions offering degrees in Interpreter Training will accept these courses as prerequisites to their programs.

Employment Opportunities

The nationwide shortage of qualified ASL Interpreters in the United States is at an all time high and continues to escalate. With the passage of the ADA act, the public is required to make accommodations for Deaf/Hard-of-Hearing patrons. Sign Language Interpreters are the most sought after accommodation for D/HH people. Public schools, higher education, health care providers, hospitals, courts, public safety and other government offices are seeing increased demand for qualified ASL Interpreters.

Department Course Offerings

AMSL 1410	American Sign Language I	(4cr)
AMSL 1412	American Sign Language II	(4cr)
AMSL 2370	Topics in American Sign Language	(1-4cr)
AMSL 2410	American Sign Language III	(4cr)
AMSL 2412	American Sign Language IV	(4cr)
AMSL 2414	Conversational ASL	(1cr)
AMSL 2420	Deaf Culture	(3cr)

AMERICAN STUDIES



Department Description

American Studies is an interdisciplinary program that offers students a unique way of understanding how they have been shaped by America's multicultural environment as well as a broader understanding of the diversity in American culture and history. Drawing upon resources from the humanities and the social sciences, students analyze culture, history, literature, religion, science, philosophy, and the arts to better grasp American society and America's place in the global perspective. Students taking an American Studies course can expect to develop critical thinking and writing skills, and to explore the significance of race, class, gender and religious experiences in forming who we are as a nation.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

Students may elect to complete the 12-credit Women's Studies Certificate, which will prepare graduates to approach the world with an awareness of women from various ethnic identities, classes and cultures. By understanding the fundamental issues raised in feminist scholarship, graduates will know how to develop effective strategies in order to act as agents of positive change. The curriculum is designed to address the changes taking place in the world today and the impact of those changes on women's lives.

Department Course Offerings

AMST 1400	Intro to Women's Studies	(3cr)
AMST 2402	Gender and Popular Culture	(3cr)
AMST 2420	Women and Religion	(3cr)

ANTHROPOLOGY



Department Description

Courses in Anthropology address questions about the human experience: What does it mean to be human? How does the human experience vary across time and culture? How do people organize their lives to make sense of the world in which they live? How does culture influence how people interpret their world?

Students of anthropology learn to be respectful of diversity by understanding the reasons behind our differences. They develop a global perspective by learning to look beyond their own world view to see the world through other eyes. Students also develop analysis skills, communications skills and an understanding of many different cultures. The field of anthropology includes both cultural anthropology and archeology, along with physical and linguistic anthropology.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.

- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

Students in this program may earn a certificate that will enrich their knowledge of the American Indians of the central Minnesota region. The American Indian Studies certificate explores the culture, history, art and literature of the American Indian.

Transfer Opportunities

Anthropology courses generally transfer to all accredited schools. The issues addressed in anthropology prepare students to study in many fields. All aspects of life today can be enhanced by a cross-cultural perspective.

Employment Opportunities

Many anthropologists find careers working with diverse cultures or in any field requiring a global perspective such as education, public service, social and political activism, as well as private sector careers. An archeology focus prepares students to teach or to work with agencies that do excavation and/or survey archeology, artifact inventory, forensics, and related areas.

Career Opportunities

Anthropologist
 Museum Curator/Technician
 Collections Manager
 Educator
 Communications Archeologist
 Laboratory Assistant
 Technician National/State Park Interpreter
 Cultural Resource Management Paleontologist
 International Agency Staff
 Peace Corps Worker
 Linguist

Department Course Offerings

ANTH 1457	Cultural Anthropology	(3cr)
ANTH 2411	Cultures of American Indians	(3cr)
ANTH 2425	Cultures of Latin America	(3cr)

ART



Department Description

The Art Department serves students planning to major or minor in Studio Art or Art Education, as well as students seeking to fulfill liberal arts requirements for transfer. Students will develop the skills necessary to produce art and experience the creative decision making process, enabling students to develop individual excellence in their work. Through art history classes, students will develop an understanding of the unfolding of the arts through time and contributions made through art to the larger culture.

Department Learning Outcomes

Students will be able to:

- Demonstrates proper use of tools & media.
- Understand and apply the elements and principles of visual composition.
- Make artwork that reflects a conscious thought process.

Employment Opportunities

Students completing a bachelor's degree in Art are frequently encouraged to attend graduate school to continue their development, eventually becoming self-employed studio artists. Art Education majors may go on to teach in the K-12 school system.

Department Course Offerings

ARTS 1401	Black & White Photo I	(3cr)
ARTS 1403	Color Photo I	(3cr)
ARTS 1420	The Art of Digital Photography	(3cr)
ARTS 1458	Drawing	(3cr)
ARTS 1459	2-D Design & Color	(3cr)
ARTS 1467	Watercolor Painting	(3cr)
ARTS 1468	Painting	(3cr)
ARTS 1470	Art Appreciation	(3cr)
ARTS 1487	Ceramics: Beginning Hand Building	(3cr)
ARTS 1488	Ceramics: Beginning Throwing	(3cr)
ARTS 1489	Intermediate Ceramics	(3cr)
ARTS 1510	Autumn Landscape Photography	(3cr)
ARTS 1512	The Art of Photographing Wildflowers	(3cr)
ARTS 1596	Topics in Art	(1-3cr)
ARTS 1597	Topics in Art	(1-3cr)
ARTS 1598	Topics in Art	(1-3cr)
ARTS 2401	Black & White Photo II	(3cr)
ARTS 2403	Color Photo II	(3cr)
ARTS 2485	American Indian Art	(3cr)
ARTS 2486	Art History/Ancient	(3cr)
ARTS 2487	Art History/Modern	(3cr)
ARTS 2490	Art History/Non-Western	(3cr)
ARTS 2583	Independent Study	(1-3cr)

BIOLOGY



Department Description

Courses in Biological Sciences involve numerous approaches to the life processes, including interactions at the molecular, cellular, tissue, organ, organ system, organism, population, community, and ecosystem levels.

Department Learning Outcomes

Students will be able to:

- Formulate and test hypotheses by performing laboratory, simulation, or field experiments in natural science disciplines.
- Demonstrate understanding of scientific theories.
- Communicate experimental findings, analyses, and interpretations both orally and in writing.
- Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

Special Course Requirements

A number of courses in Biology do not require any special requirements, as they are designed for the inquisitive individual desiring to learn about life. There are also a number of courses that require prior knowledge gained in a prerequisite course.

Transfer Opportunities

Biology courses transfer to higher education institutions either as general electives or important components of a major. Students should check with their possible transfer institution before enrolling in a course.

Employment Opportunities

Employment opportunities abound with a degree in Biology or even just a few select courses. Often students can acquire internships or summer jobs giving them a taste of what biology has to offer.

Career Titles

Biologist, Biological Technician, Lab Technician, Environmental Biologist, Nurse, Medical Doctor, Dentist, Chiropractor, Research Scientist, Geneticist, Agronomist, Entomologist, Cell Biologist, Zoologist, Botanist, Limnologist, Ecologist, Microbiologist, Pathologist, Parasitologist, Hematologist, Physiologist, Anatomist, Virologist, Neurobiologist, Horticulturist, Wildlife Biologist, Gerontologists, Taxonomist, Veterinarian, Ichthyologist, Biotechnologist, Field Biologist, Histologist, Reproduction Biologist, Immunologist, Conservation Biologist, Endocrinologist, Embryologist, Algologist, Bryologist, Evolutionary Biologist, Paleontologist, Biochemist, Marine Biologist, Molecular Biologist, Ornithologist, Biology Instructor, Pharmacologist, Toxicologist, Forensic Scientist, Herpetologist, Mycologist, Behaviorist, Aquatic Biologist, Mammalogist, Archeologist, and Biological Sales.

Department Course Offerings

BIOL 1404	Human Biology	(3cr)
BIOL 1411	Concepts of Biology	(3cr)
BIOL 1415	Environmental Biology	(3cr)
BIOL 1431	General Biology I	(5cr)
BIOL 1432	General Biology II	(5cr)
BIOL 2401	Nutrition	(2cr)
BIOL 2411	Biology of Women	(3cr)
BIOL 2416	General Ecology	(3cr)
BIOL 2417	General Ecology Lab	(1cr)
BIOL 2457	Microbiology	(4cr)
BIOL 2467	Anatomy & Physiology I	(4cr)
BIOL 2468	Anatomy & Physiology II	(4cr)

CHEMISTRY



Department Description

Chemistry is a study of matter and all its interactions. It is central to our understanding of various disciplines such as biology, geology, materials science, medicine, physics and many branches of engineering.

Chemistry and chemicals play a major role in our economy and affect our daily lives in a wide variety of ways. A course in chemistry can help you see how a scientist thinks about the world and how to solve problems. Knowledge and skills developed in chemistry will benefit you in many career paths and will help you become a better-informed citizen in a world that is becoming more technologically complex and interesting.

Department Learning Outcomes

Students will be able to:

- Formulate and test hypotheses by performing laboratory, simulation, or field experiments in natural science disciplines.
- Demonstrate understanding of scientific theories and the ways in which scientists develop, express, and question theories in the field of chemistry.
- Communicate their findings, analyses, and interpretations with other students and the instructor orally and in writing.

Special Program Requirements

Besides a natural curiosity about what makes up the world around us and why things are the way they are, basic math and algebra skills are required for problem solving and chemical modeling. Please refer to the course catalog for each chemistry course's math requirements.

Transfer Opportunities

Courses taken in chemistry will help develop your problem solving skills—a talent that is highly valued in today's workplace. In addition, chemistry courses are required for almost all scientific and medical careers. And although technology continues to change at a rapid pace, the basic principles and concepts of chemistry remain the same. As a result, the knowledge and skills acquired in chemistry courses never become outdated and can transfer from one field of technology to another when making career choices or transitions.

Employment Opportunities

Chemistry majors have career opportunities in research labs, teaching positions, environmental fields, pharmaceuticals or entrance into pharmacy or medical school.

Career Titles

Research Assistant
 Lab Assistant
 Analytical Chemistry Technician
 Production Chemist
 Quality Control Chemist
 Chemical Sales
 Environmental Chemist
 Chemistry Instructor

Department Course Offerings

CHEM 1405	Life Science Chemistry	(3cr)
CHEM 1406	Life Science Chemistry Lab I	(1cr)
CHEM 1410	Environmental Chemistry	(3cr)
CHEM 1414	Fundamentals of Chemistry	(4cr)
CHEM 1424	Chemical Principles I	(5cr)
CHEM 1425	Chemical Principles II	(5cr)
CHEM 2472	Organic Chemistry I	(5cr)
CHEM 2473	Organic Chemistry II	(5cr)

COLLEGE & CAREER STUDIES



Department Description

The College & Career Studies Department courses are designed to assist students in learning college and career success strategies and life management skills. These courses focus on development of the whole person and help students identify personal, educational, and career goals as well as make satisfying decisions for transition to the workforce as productive members of society. The learning and self-management skills developed in college and career courses can serve a lifetime. These courses do not lead to a major but are designed to provide students with the skills necessary for achieving personal, academic, and career success.

Department

Learning Outcomes

Students will be able to:

- Demonstrate an understanding of self through exploration of interests, personal values and personality traits.
- Develop and apply a repertoire of study skill strategies to optimize their academic success.
- Develop and apply job-search strategies that will lead to more effective marketing of their occupational skills.
- Develop and articulate a personal definition of a “successful life.”

Department Course Offerings

CCST 1300	Transition to College for Students with Special Needs.	(2 cr)
CCST 1510	College Success Skills.	(3 cr)
CCST 1512	Combat to Classroom.	(2 cr)
CCST 1520	Career Planning.	(2 cr)
CCST 1530	Employment Strategies.	(3 cr)
CCST 1541	Student Senate I.	(1 cr)
CCST 1542	Student Senate II.	(1 cr)
CCST 1550	On Course: Introduction to College.	(1 cr)
CCST 1552	On Course: Success Strategies for Athletes.	(1 cr)
CCST 1554	On Course: Strategies for Re-Entry Students.	(2 cr)
CCST 1558	Introduction to e-Learning.	(1 cr)
CCST 1559	Money Management Skills.	(1 cr)
CCST 1560	Math without Fear.	(2 cr)
CCST 1570	Thinking, Learning & Communicating.	(3 cr)
CCST 1590	Service Learning and Civic Engagement.	(1 cr)
CCST 2512	Honors Leadership Development.	(3 cr)

EARTH SCIENCE**Department Description**

Earth science encompasses a broad range of interdisciplinary fields built on a foundation of physical sciences and mathematics. The transfer majors suggested in this section are designed to effectively prepare you for transfer to a four-year university major in one of the many sub-disciplines of earth science.

Geology, Oceanography, Atmospheric Science, and Environmental Science all belong to the Earth Science discipline. Earth science classes at CLC offer you a variety of experiences for learning about Earth and the environment, including traditional classroom courses, on-line coursework, laboratory work and field trips. If you are considering earth science as a major you are encouraged to discuss your plans with one of the Earth Science faculty at CLC during your first year of study.

Department Learning Outcomes

Students will be able to:

- Comprehend complexity of interactions within and across Earth's concentric spheres: lithosphere, hydrosphere, atmosphere, biosphere, and ethnosphere.
- Show literacy in contemporary issues in Earth Science.

- Use an informed, analytical approach to suggest solutions to contemporary issues in Earth Science from a scientific perspective.
- Generate and analyze data in Earth Science in basic laboratory and field investigations.

Special Program Requirements

Extensive coursework in science and math is needed to enter any university earth science major. In your first at CLC year you should make a solid beginning in math, physics, and chemistry coursework that will form the foundation of your major.

Employment Opportunities

Environmental Consultant
Hydrogeologist
Soil Scientist
Environmental Protection Specialist
Naturalist
Coastal Zone Manager
Laboratory Technician
Oceanographer
Science Technician
Teacher
Professor
Atmospheric Scientist
Geoscientist

Department Course Offerings

ESCI 1400	Geology of National Parks.....	(3cr)
ESCI 1405	Astronomy.....	(4cr)
ESCI 1411	Physical Geology.....	(4cr)
ESCI 1421	Minnesota Geology.....	(3cr)
ESCI 1444	Natural Disasters.....	(3cr)
ESCI 1451	Oceanography.....	(3cr)
ESCI 1452	Oceanography Lab.....	(1cr)
ESCI 1454	Earth Science and the Environment.....	(4cr)
ESCI 1455	Honors Earth Science and the Environment.....	(4cr)
ESCI 2581	Topics in Earth Science.....	(1-3cr)

ECONOMICS



Department Description

A wise sage once suggested that economics is the study of peoples' efforts to satisfy their unlimited wants by utilizing their limited resources. Economics studies the cost implications of an individual making a decision to go to college, the cost implications of a society making a decision to go to war, and everything in-between. Economics might be the most broadly applied of the social sciences because economists believe that all human decisions have economic costs and, therefore, are worthy of economic analysis.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Program Requirements

Courses in economics involve reading, writing, and analyzing information and data. College level skills in these areas are important.

Transfer Opportunities

Economics courses offered at Central Lakes College fulfill requirements within the Minnesota Transfer Curriculum, Central Lakes College's graduation requirements, and ready transfer to four-year institutions.

Employment Opportunities

A bachelor's degree in economics will open doors into a number of career fields including the following: management, public administration, public policy, banking, education, business policy, and many others. As well, it can be used as a step to advanced degrees in many fields.

Department Course Offerings

ECON 1450	The American Economy (3cr)
ECON 2401	Principles of Economics-Macroeconomics (3 cr)
ECON 2402	Principles of Economics-Microeconomics (3cr)

ENGINEERING**Department Description**

Engineering appeals to students who enjoy the challenge of learning how things work and using this knowledge to improve the world in which they live. They are creative thinkers who enjoy design activities and building things.

Department Learning Outcomes

Students will be able to:

- Accurately use mathematical functions that apply to Engineering problems.
- Use graphing technologies to help explain physical phenomena related to engineering challenges and discuss them orally or in writing.
- Correctly apply the principals governing physical phenomena to solve engineering problems collaboratively.

Special Course Requirements

A strong background in math is required for successful completion of second-year engineering courses.

Transfer Opportunities

Central Lakes College offers in Associates of Science (A.S.) Degree that is designed to lead to a bachelor's degree in Engineering at a four-year university. These credits transfer in full through articulation agreements with all area engineering schools. CLC students most often transfer to the University of Minnesota (Minneapolis or Duluth), North Dakota State University (NDSU), the University of North Dakota (UND), Mankato State University (MSU), and St. Cloud State University (SCSU).

Employment Opportunities

Engineering degrees are among the most highly paid of Bachelor's degrees and span a very large number of fields. The most common engineering fields include Civil Engineering, Mechanical Engineering, Electrical Engineering, and Chemical Engineering. Other fields include, but are not limited to, Aerospace Engineering, Computer Engineering, and Industrial Engineering. Engineers commonly transition to management positions in business and industry, start their own companies, or use their engineering degree to facilitate movement into other professional fields such as patent law and medicine.

Career Titles

Engineer
Patent Attorney
Chief Executive Officer (CEO)

Department Course Offerings

ENGR 1411	Engineering Physics I	(5cr)
ENGR 1412	Engineering Physics II	(5cr)
ENGR 1500	Introduction to Engineering	(2cr)
ENGR 1510	Introduction to Engineering Design	(2cr)
ENGR 1560	Digital Logic Design	(3cr)
ENGR 2547	Statics	(3cr)
ENGR 2548	Dynamics	(3cr)
ENGR 2549	Mechanics of Materials	(3cr)
ENGR 2569	Circuits Analysis I	(4cr)
ENGR 2570	Circuit Analysis II	(3cr)
ENGR 2580	Topics in Engineering	(1-3cr)

ENGLISH

Department Description

The study of English means discovering the dynamic process of writing and the influential impact of literature on human thought. The English Department offers a variety of writing and literature courses that create opportunities for students to apply creative and analytical insight to various rhetorical situations. Faculty members guide writers and readers from the initial stages of discovery to the final steps of drafting cohesive, logical, and intelligent texts. A strong background in writing and literature assures that students possess skills necessary to succeed personally, academically, and professionally today and in the future.

Department Learning Outcomes

Students will be able to:

- Choose, develop, and support a thesis, producing a unified and coherent oral or written text that demonstrates awareness of purpose and audience and uses standard edited English.
- Utilize research tools, use correct and appropriate documentation format, and properly cite credible sources.
- Demonstrate understanding of the implications of cultural and historical contexts in literature.

Special Program Requirements

Students are strongly advised to take English 1410 in the first semester and English 1411 in the second semester, as instruction in expository and research writing will promote success in other classes.

Employment Opportunities

Employers seek employees with strong English skills.

Career Opportunities

Advertising Copywriter
 Computer Instructional Designer
 Copy Editor or Editorial Assistant
 Corporate Communications Specialist
 Freelance Writer
 Publications Researcher
 Radio/Television Copywriter
 Journalist
 Technical Writer
 Secondary School Teacher
 Professor

Department Course Offerings

ENGL 1410	Composition I	(4cr)
ENGL 1411	Composition II	(4cr)
ENGL 1421	Honors Composition II: Public & Professional Writing	(4cr)
ENGL 1422	Practical Writing	(3cr)
ENGL 1450	Introduction to Humanities	(3cr)
ENGL 1452	Classical Mythology	(3cr)
ENGL 1454	Film Appreciation	(3cr)
ENGL 1460	Honors Literature: The Great Books	(3cr)
ENGL 1463	Introduction to Literature	(3cr)
ENGL 1468	Poetry	(3cr)
ENGL 1469	American Short Story	(3cr)
ENGL 1477	Authors in Focus	(1-3cr)
ENGL 1478	Authors in Focus	(1-3cr)
ENGL 1510	English for Speakers of Other Languages I	(3cr)
ENGL 1512	English for Speakers of Other Languages II	(3cr)
ENGL 1566	Student Newspaper I	(1cr)
ENGL 1567	Student Newspaper II	(1cr)
ENGL 1580	Topics in Humanities	(1-3cr)
ENGL 1581	Topics in English	(3cr)
ENGL 1590	Service Learning	(1cr)
ENGL 1596	Writing II	(3cr)
ENGL 2450	World Literature	(3cr)
ENGL 2451	Women in Literature	(3cr)
ENGL 2455	American Indian Literature	(3cr)
ENGL 2457	British Literature Pre-1800	(3cr)
ENGL 2458	British Literature 1800-Present	(3cr)
ENGL 2467	American Literature Pre-1861	(3cr)
ENGL 2468	American Literature 1861-present	(3cr)
ENGL 2470	Creative Nonfiction	(3cr)
ENGL 2483	Creative Writing	(3cr)
ENGL 2484	Advanced Creative Writing	(3cr)
ENGL 2566	Student Newspaper III	(1cr)
ENGL 2567	Student Newspaper IV	(1cr)

ENVIRONMENTAL STUDIES



Department Description

Environmental Studies is the interdisciplinary field of study concerned with problems in the relationship between humanity, society, and the natural environment. Of particular concern is the impact of technology on the natural environment and its implications for human welfare. The basic ideas for Environmental Studies originated in natural sciences such as biology, ecology, physics, and chemistry; social sciences such as sociology, political science, economics, and law; and humanities such as philosophy and history. Accordingly, courses in Environmental Studies are designed to enrich students' knowledge of biological, physical and social aspects of the environment and their awareness of environment related issues.

Department

Learning Outcomes

Students will be able to:

- Demonstrate basic knowledge of environmental relationships.
- Student will be able to think critically as they compare environmental processes with management of the world resources.
- Understand the importance of Natural Science as they relate to the interconnectedness of all things through their understanding of the forces of the universe, evolution, and the importance of Natural Resource Management around the world.

Special Department Information

College-level study and communication skills are necessary for success in Environmental Studies. Students may elect to complete a 15-credit certificate in Environmental Studies.

Transfer Opportunities

The analytical, critical thinking, and communication skills honed in Environmental Studies courses enhance a student's chance for success in any major. Many 4-year colleges and universities have degree programs in Environmental Studies.

Employment Opportunities

Environmental Studies students enjoy a versatility of skills and a wide range of exciting careers in federal, state and local governments; law; business; nonprofit organizations; journalism; education; research; and university and college teaching. In fact, any field that requires analytical and communication skills offers potential employment opportunities for Environmental Studies students.

Department Course Offerings

ENVR 1400 Introduction to Environmental Studies (3cr)

GEOGRAPHY

Department Description

Geography literally means “writing about the Earth”. Geography is so interesting and useful because it includes information from many other disciplines like political science, history and economics and from sciences such as geology, biology and meteorology. What connects these disciplines to geography is that they all have to happen somewhere. The power of place and the concepts of location and interaction are central to understanding geography. Places are important because they help to shape the events and the people that are associated with them. Geography brings many disciplines together to create a vivid and unique understanding of our lives on Earth.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Requirements

A desire and interest to know more about the physical and cultural wonders of the world around you are all that you need to get started in geography.

Transfer Opportunities

The spatial understanding and the social and physical science skills acquired in geography lend themselves to your success in many majors. Knowledge of spatial relationships enhances the study of politics, history and economics as well as the study of geology, biology and meteorology. Business and marketing majors often need the skills and insights geography offers as do planners and city managers.

Employment Opportunities

Geography as a discipline is becoming more popular at colleges and universities as it offers students a broad variety of career skills. A geography education can lead to employment in many diverse fields. There are lots of public or private sector employment opportunities in training in geographic information systems (GIS). Many high school social studies teachers study geography as do city planners, corporate location analysts, E911 system designers and dispatchers, land surveyors, plant and animal researchers, climate specialists and government employees at all levels. Geography is useful in business as it promotes an understanding of the similarities and differences in people and places. This is very useful in designing marketing campaigns directed at particular geographic or demographic groups.

Career Titles

Geographer
Professor
Social Studies Teacher
Urban/City Planner
GIS Specialist
Marketing Specialist
Location Analyst
Cartographer
Surveyor
Travel Planner

Department Course Offerings

GEOG 1400	Physical Geography	.....	(3cr)
GEOG 1410	Maps & Places	.....	(3cr)
GEOG 1421	World Regional Geography	.....	(3cr)
GEOG 1459	Cultural Geography	.....	(3cr)
GEOG 1460	Honors Cultural Geography	.....	(3cr)
GEOG 1598	Topics in Geography	.....	(1-2cr)
GEOG 1599	Topics in Geography	.....	(1-2cr)
GEOG 2401	Economic Geography	.....	(3cr)

HEALTH



Department Description

Health courses help create and disseminate knowledge with the aim of preventing disease and promoting the health of populations in the United States and worldwide. Our courses are concerned with personal and community health promotion. Included in our offerings are specialized training for Emergency Medical Technicians, First Responders, and those charged with basic life support. In addition, we offer a course that examines the unique biology and other aspects of gender focused on wellness from a woman's perspective. Another studies the physical, mental, emotional, social, and spiritual aspects of one's health as relates to sexuality. Today's culture faces challenges to societal health, as well as that of the individual. Drug Awareness is therefore considered by many to be an essential three-credit course.

Department Learning Outcomes

Students will be able to:

- Understand and apply the basic principals related to health and wellness with a goal of promoting both individual health/wellness and that of the greater society as well.
- Recognize and define healthy behaviors as they exist in the areas of physical, mental, emotional, and social health as well as the

spiritual aspects of one's health as it relates to sexuality.

Employment Opportunities

Whether one is working toward a greater undergraduate degree or planning more immediate career goals following CLC, health courses provide relevant preparation for managing one's personal health in relation to values and choices that await everyone. Several health courses at CLC impart advanced knowledge to further the careers of emergency care professionals. Successful completion of the 5-credit EMT course qualifies the student to sit for the National Registry of EMTs examination. Internships may be available for health credits from CLC. There is a growing need for public health officials and private-sector experts capable of improving the quality of life in the workplace and at home.

Special Department Information

Students who wish to enroll in the Emergency Medical technician course must first have CPR certification.

Career Titles

Dietitian

Emergency Medical Technician (Basic, Intermediate and Paramedic)

Health Educator

Health Unit Coordinator

Health Science Librarian

Medical Illustrator (Photographer, Writer)

Health Information Administrator

Certified Athletic Trainer

Recreational Therapist

Physical Therapist

Rehabilitation Counselor

Department Course Offerings

HLTH 1501	Personal Health & Wellness	..... (3cr)
HLTH 1507	Drug Awareness	..... (3cr)
HLTH 1510	Intro to Massage	..... (2cr)
HLTH 1531	Women's Health	..... (3cr)
HLTH 1541	Human Sexuality	..... (3cr)
HLTH 2550	Internship in Health	..... (1-4cr)
HLTH 2570	Topics in Health	..... (1-4cr)

HISTORY

Department Description

Our goal is to promote the understanding of the historical past. Studying history gives individuals the skills and perspective needed to think about and understand the complex world in which we live. Courses in history will ask and answer questions about why and how the world's people, institutions, ideas, economies and cultures developed and changed over time. History students will read current scholarship, engage in discussions, view films and documentaries, and research topics of interest.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

College-level reading and writing skills will help students be more successful in all history courses.

Transfer Opportunities

History courses fulfill a number of requirements for the Minnesota Transfer Curriculum, as well as Central Lakes College graduation requirements. Students who plan on majoring in History at a university would be well-advised to take both the US and World History survey courses. This will be good preparation for upper division work in whatever area of history you might choose to make your area of concentration.

Employment Opportunities

A liberal arts degree in history can open the door to a multitude of careers. Education, Journalism, Business and Law are just a few of the professions employing individuals with history degrees. Listed below are some of the possible career categories. Visit www.history-ans.org/jobs/index for more information.

Career Titles

Educator
 Researcher/Writer
 Archivist
 Records Manager
 Information Manager
 Legislative Staff
 Foundation Staff
 Editing and Publishing
 Lawyers and Paralegal
 Museum Curator

Department Course Offerings

HIST 1406	Western Civilization, Pre-History to 1500	(3cr)
HIST 1407	Western Civilization, 1500 to present	(3cr)
HIST 1412	World History, Pre-History to 1500	(3cr)
HIST 1413	World History, 1500 to present	(3cr)
HIST 1472	U.S. History to 1877	(3cr)
HIST 1473	U.S. History 1877 to present	(3cr)
HIST 1475	Honors U.S. History 1865 to present	(3cr)
HIST 2404	Minnesota History	(3cr)
HIST 2406	Ojibwe History	(3cr)
HIST 2411	American Indian History	(3cr)
HIST 2420	History of Women in the U.S.	(3cr)
HIST 2570	Topics in History	(3cr)

MATHEMATICS**Department Description**

Mathematics is an essential tool for understanding other disciplines and the world around us. Courses in mathematics will help students develop logical reasoning and problem solving skills, forming a basis for success in their careers and future study. The mathematics department offers pre-college mathematics courses to prepare students for college level courses, as well as the necessary courses to complete the mathematics requirement for a four year degree.

Department Learning Outcomes

Students will be able to:

- Demonstrate sequential reasoning.
- Communicate mathematically.
- Exhibit proficiency in using technology.

Special Department Information

Students should consult with a counselor to determine their specific degree or program requirements in mathematics.

Transfer Opportunities

The suggested curriculum for students interested in obtaining a four-year degree in mathematics or mathematics education is the following:

MATH 1477	Calculus I
MATH 2459	Differential Equations
MATH 1478	Calculus II
MATH 2457	Linear Algebra
MATH 2458	Multivariable Calculus

Employment Opportunities

Most careers require a strong background in mathematics. Courses in mathematics greatly benefit anyone pursuing a career in mathematics or science education, accounting, engineering, pharmacy, actuarial science, computer science, finance, management, and sales and marketing.

Department Course Offerings

MATH 0581	Pre-College Math	(3cr)
MATH 0582	Pre-College Math	(3cr)
MATH 0583	Pre-College Math	(3cr)
MATH 0584	Pre-College Math	(3cr)
MATH 0585	Pre-College Math	(3cr)
MATH 0586	Pre-College Math	(3cr)
MATH 0587	Pre-College Math	(3cr)
MATH 0588	Pre-College Math	(3cr)
MATH 0589	Pre-College Math	(3cr)
MATH 1441	Concepts in Mathematics	(3cr)
MATH 1460	Intro to Statistics	(4cr)
MATH 1461	Honors Introduction to Statistics	(4cr)
MATH 1470	College Algebra	(3cr)
MATH 1472	Precalculus	(5cr)
MATH 1477	Calculus I	(5cr)
MATH 1478	Calculus II	(5cr)
MATH 1500	Applied Mathematics	(3cr)
MATH 1506	Beginning College Algebra	(4cr)
MATH 1510	Math for Elementary Teachers I	(3cr)
MATH 1512	Math for Elementary Teachers II	(3cr)
MATH 1580	Topics in Math	(1-3cr)
MATH 2457	Linear Algebra	(3cr)
MATH 2458	Multivariable Calculus	(4cr)
MATH 2459	Differential Equations	(4cr)

MUSIC

Department Description

Students may take basic musicianship classes in voice, piano, brass, woodwinds and guitar as well as basic music theory, appreciation, jazz and pop music history and world music. Vocal and instrumental performing groups such as Concert Choir, Chamber Singers, Jazz Band, Concert Band and Brass Ensemble afford students the opportunity to maintain and develop musical skills. The instrumental groups are also open to public participation offering musicians of all ages a chance to keep up the skills.

Department Learning Outcomes

Students will be able to:

- Demonstrate knowledge of specific areas of music.
- Demonstrate proficiency in preparing and performing musical works (performing groups).
- Demonstrate proficiencies in applied music (instrumental, vocal, guitar, piano, audio recording).

Special Department Information

Performing groups require a basic level of musical knowledge and a desire to raise that level.

Transfer Opportunities

Applied music classes in voice, piano, brass, woodwinds, and the performing group credits transfer as music classes and will apply toward the requirements of a music majors at most 4-year institutions.

Employment Opportunities

The offerings of the CLC Music Department serve to enrich the lives of the students at CLC through the performing groups, applied music lessons, and appreciation classes. They also afford the student who has not made up his or her mind about a music major the opportunity to see if a degree in music is what one wishes to pursue. The Music Industry class gives the students a taste of several possible careers in music including radio broadcast-

ing, performing, recording, retail management and education. The Audio Recording class trains students on digital software which is the standard platform for the recording industry. Several of our students have gone on to find employment in these fields through contacts made during their time at CLC.

Career Titles

Music Teacher
Church Choir Director
Church Organist
Performing Musician
Recording Engineer
Radio Broadcaster
Music Retail Worker
Worship Band Leader/Musician

Department Course Offerings

MUSC 1403	American Popular Music . . . (3cr)
MUSC 1405, 1406	Jazz Band I, II(1cr)
MUSC 1408, 1409	Community Band I, II(1cr)
MUSC 1415, 1416	Brass Ensemble I, II(1cr)
MUSC 1421, 1422	Cantare' Concert Choral I, II . . .(1cr)
MUSC 1431, 1432	Chamber Singers I, II(1cr)
MUSC 1441, 1442	Applied Music - Guitar I, II . . .(1cr)
MUSC 1450	Music in World Cultures (3cr)
MUSC 1452	Intro to Music Industry(3cr)
MUSC 1453	Audio Recording I(3cr)
MUSC 1455	Voice Training(2cr)
MUSC 1457	Music Appreciation(3cr)
MUSC 1459	Fundamentals of Music(3cr)
MUSC 1464, 1465	Applied Music - Brass I, II . . .(1cr)
MUSC 1475, 1475	Applied Music - Woodwind I, II(1cr)
MUSC 1481, 1482	Applied Music - Piano I, II . . .(1cr)
MUSC 1485, 1486	Applied Music - Instrumental I, II(1cr)
MUSC 1491, 1492	Applied Music - Voice I, II . . .(1cr)
MUSC 2401	Evolution of Jazz(3cr)
MUSC 2405, 2406	Jazz Band III, IV(1cr)
MUSC 2408, 2409	Community Band III, IV(1cr)
MUSC 2415, 2416	Brass Ensemble III, IV(1cr)
MUSC 2421, 2422	Cantare' Concert Chorale III, IV(1cr)
MUSC 2423, 2424	Cantare' Concert Chorale V, VI(1cr)
MUSC 2431, 2432	Chamber Singers III, IV(1cr)
MUSC 2441, 2442	Applied Music - Guitar III, IV . .(1cr)
MUSC 2464, 2465	Applied Music - Brass III, IV . .(1cr)
MUSC 2475, 2476	Applied Music - Woodwind III, IV(1cr)
MUSC 2481, 2482	Applied Music - Piano III, IV . .(1cr)
MUSC 2485, 2486	Applied Music - Instrumental III, IV(1cr)
MUSC 2491, 2492	Applied Music - Voice III, IV . .(1cr)

OJIBWE STUDIES



Department Description

Ojibwe Studies focuses on the language, history and culture of the Ojibwe within the context of the American Indian experience.

Special Department Information

Students in this program may earn a certificate that will prepare them to enrich their knowledge of the Ojibwe people of the central Minnesota region.

Department Course Offerings

OJIB 1401	Beginning Ojibwe I	(4cr)
OJIB 1402	Beginning Ojibwe II	(4cr)
OJIB 2401	Intermediate Ojibwe I	(4cr)
OJIB 2402	Intermediate Ojibwe II	(4cr)
OJIB 2500	Conversational Ojibwe	(3cr)

PHILOSOPHY



Department Description

Courses in Philosophy cover life's fundamental questions, such as what do we know, and how do we know it? What is the source and function of moral behavior? What is the nature of logic and correct reasoning? Students of Philosophy learn how history's most profound thinkers have attempted to answer these questions; students also learn the thinking and reasoning skills that will allow them to answer these questions for themselves.

Special Department Information

Because courses in Philosophy often require students to express themselves in writing, it is suggested that students complete ENGL 1410 Composition I prior to taking a Philosophy course.

Department Learning Outcomes

Students will be able to:

- Demonstrate an ability to recognize and critically evaluate issues that arise when people think about the nature of truth, life, the universe, morality, mind, God, and other issues of philosophical interest.
- Become more aware and reflective individuals capable of independently assessing commonly held clichéd social assumptions

and articulating informed and well-reasoned evaluations.

- Become self motivated thinkers possessing the ability to rationally determine their beliefs and values for themselves.

Transfer Opportunities

The analytical skills honed in Philosophy courses enhance a student's chance for success in any major. Students looking beyond a major, or considering a future specialization in philosophy, should know that Philosophy majors consistently register higher LSAT, GRE, and GMAT scores than students from other disciplines. The University of Virginia Law School found that Philosophy majors averaged 15 points higher on the Law School entrance exam than students from other majors. Courses in Philosophy greatly benefit anyone interested in law school, seminary, medicine, journalism, or attaining any graduate degree.

Employment Opportunities

While there are few jobs with the title "Philosopher," Philosophy's focus on thinking skills provides students with a valuable asset in the rapidly changing job market. Not all philosophers become professors. Consider this partial list of philosophers (majored in Philosophy): Woody Allen, William Bennett, Bill Clinton, David Duchovny, Umberto Eco, John Elway, Harrison Ford, Vaclav Havel, Bruce Lee, Steve Martin, Pope John Paul II, Susan Sontag, George Soros, and Alex Trebeck. Some employers look for skills, but all employers value thinking.

Career Titles

Lawyer , Journalist, Professor

Department Course Offerings

PHIL 1411	World Religions	(3cr)
PHIL 1415	Philosophy and Popular Culture	(3cr)
PHIL 1417	Immortality and the Afterlife	(3cr)
PHIL 1420	Cyber Ethics, or if Aristotle Had a Laptop	(2cr)
PHIL 1421	Critical Thinking	(3cr)
PHIL 1460	Logic	(3cr)
PHIL 2410	Introduction to Philosophy	(3cr)
PHIL 2420	Ethics	(3cr)
PHIL 2421	Honors Ethics	(3cr)
PHIL 2430	Contemporary Moral Problems	(3cr)

PHYSICAL EDUCATION



Department Description

Today's students will represent the first generation ever to have a lifespan shorter than that of their parents, unless current diet and exercise habits change. So says the President's Council on Physical Fitness and Sports. Courses in Physical Education provide co-educational opportunities to advance one's fitness as well as acquire knowledge and skills associated with athletics, athleticism, and team sports.

The schedule endeavors to afford students season-oriented activities that are able to make use of facilities and outdoor environments, from weight rooms and dance floors to our area's magnificent golf courses and cross-country ski trails. Varsity sports, which earn the participant one credit per season, provide intercollegiate athletic competition as a higher education platform to further one's competitive abilities and, in some cases, pursuit of professional athletic status.

Department

Learning Outcomes

Students will be able to:

- Demonstrate understanding of how to improve their own level of fitness.
- Demonstrate understanding of the health benefits of exercise.
- Demonstrate skills related to the practice of a sport/activity.

Special Department Information

Entrance to any of the college's intercollegiate athletics programs requires passage of a physical examination.

Employment Opportunities

Some graduates from the two-year college continue studies as undergraduates in Physical Education degree programs of universities. They become professional athletes, athletic trainers, sports officials, administrators, adaptive PE instructors and coaches, sports facility managers, and certified fitness trainers. Median wage for athletic trainers is \$32,990 per year, for coaches and scouts: \$26,740 per year. College and professional coaches usually have a bachelor's degree, and some have a master's degree. In addition, most have many years of experience playing and then coaching their sport. Most have worked their way up through the coaching ranks.

Career Titles

Personal Trainer
 Corporate Fitness Instructor
 Activities Director
 Nutrition Specialist
 Cardiovascular Fitness Instructor
 Cruise Recreation Director
 Health/Fitness Consultant
 Occupation Exercise Scientist
 Camp Director
 Professional Sports Umpire
 Professional Sports Scout
 Spa/Health Club Manager

PHYSICAL EDUCATION

Department Course Offerings

PHED 1502	Circuit Training	(2cr)
PHED 1503	Advanced Circuit Training	(1cr)
PHED 1505	Fitness Walking	(2cr)
PHED 1506	Aerobic Exercise	(2cr)
PHED 1507	Basic Horsemanship	(2cr)
PHED 1508	Bicycling	(2cr)
PHED 1510	Beginning Skiing/Snowboarding . .	(2cr)
PHED 1511	Advanced Skiing/Snowboarding . .	(2cr)
PHED 1512	Beginning Yoga	(2cr)
PHED 1513	Aerobic Conditioning	(2cr)
PHED 1514	Cardio Sampler	(2cr)
PHED 1520	Advanced Yoga	(2cr)
PHED 1521	Body Conditioning	(2cr)
PHED 1522	Weight Training	(2cr)
PHED 1523	Strength Training for Women	(2cr)
PHED 1524	Recreational Sampler	(2cr)
PHED 1525	Personal Protection Awareness . . .	(2cr)
PHED 1530	Beginning Swimming	(1cr)
PHED 1531	Intermediate & Advanced Swimming	(1cr)
PHED 1534	Beginning Golf	(2cr)
PHED 1536	Advanced Golf	(2cr)
PHED 1541	Bowling	(2cr)
PHED 1544	Basketball - Coed	(1cr)
PHED 1553	Power Volleyball	(2cr)
PHED 1570	Theory of Coaching	(2cr)
PHED 1572	Theory of Basketball	(2cr)
PHED 1573	Officiating	(1cr)
PHED 1583	Athletic Training	(2cr)
PHED 1599	Topics in Physical Education	(1-3cr)
PHED 2501	Varsity Sports - Football	(1cr)
PHED 2502	Varsity Sports - Volleyball	(1cr)
PHED 2503	Varsity Sports - Men's Basketball . .	(1cr)
PHED 2504	Varsity Sports - Women's Basketball	(1cr)
PHED 2505	Varsity Sports - Baseball	(1cr)
PHED 2506	Varsity Sports - Softball	(1cr)
PHED 2507	Varsity Sports - Golf	(1cr)
PHED 2511	Varsity Sports - Football II	(1cr)
PHED 2512	Varsity Sports - Volleyball II	(1cr)
PHED 2513	Varsity Sports - Men's Basketball II	(1cr)
PHED 2514	Varsity Sports - Women's Basketball II	(1cr)
PHED 2515	Varsity Sports - Baseball II	(1cr)
PHED 2516	Varsity Sports - Softball II	(1cr)
PHED 2517	Varsity Sports - Golf II	(1cr)

PHYSICS



Department Description

Courses in Physics cover the physical laws that govern the natural world in which we live, from the smallest particles that make up matter to the structure of the universe. All physics courses include a laboratory component that is designed to reinforce theoretical concepts with hands-on experiences and physical measurements. All physics courses use computer-based data acquisition and simulations to help students visualize and understand abstract concepts.

Department Learning Outcomes

Students will be able to:

- Accurately use mathematical functions that apply to physics.
- Use graphing technologies to help explain physical phenomena and discuss them orally or in writing.
- Correctly use unit analysis to solve problems collaboratively.

Special Department Information

College Physics is designed for students in a pre-professional track such as pre-pharmacy, architecture, pre-medicine, and pre-veterinary and requires a math competency at the level of Precalculus (Math 1472). Engineering

Physics is designed for students majoring in physics, engineering, or students wanting a challenge consistent with their mathematical skill level and requires a math competency at the level of Calculus (Math 1477).

Transfer Opportunities

All Minnesota and area universities offer Bachelor's and advanced degrees in physics. Physics is also required for anyone interested in engineering, medical technology, medicine, pharmacy, and veterinary fields. Because of their need for strong math skills, physicists often have dual degrees in Physics and Mathematics.

Employment Opportunities

Physics majors are a rare breed. In a world of high technology, a physicist is a generalist in a world of specialists. Many students majoring in physics will teach in high school or go on for advanced degrees, allowing them to teach at the post-secondary and university level where they can also engage in scientific research. Physicists also find jobs in government or industry as researchers and analysts. Physicists tend to have very interesting careers. Physicists with advanced degrees must choose a specialty. A partial list of more common areas of expertise include astrophysics, atomic and nuclear physics, solid state physics, high energy and plasma physics, spectroscopy, biological physics, and computational physics.

Career Titles

Physicist
Professor
Researcher
Scientific Analyst

Department Course Offerings

PHYS 1401 College Physics I (4cr)
PHYS 1402 College Physics II (4cr)

POLITICAL SCIENCE



Department Description

Are you interested in American politics; international affairs; critical issues such as health, the environment, and civil rights; theories concerning the ideal government and how power and resources are allocated in society? If so, you should consider studying political science. Politics affects the air we breathe, the way we're educated, the jobs we do, the communities we live in and the taxes we pay. By studying Political Science, you'll learn the principles at work behind the decisions that affect every aspect of our lives. Political science students study the systems people set up to organize their societies, from neighborhoods to nations.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

Courses in Political Science require students to read and understand written material, and to express themselves in writing and class discussion. Therefore it is suggested that students have college level study and communication skills.

Transfer Opportunities

The analytical, critical thinking, and communications skills honed in Political Science courses enhance a student's chance for success in any major. Most 4-year colleges and universities have degree programs in Political Science, and it is the most frequent undergraduate major for law students.

Employment Opportunities

Political science students enjoy a versatility of skills and a wide range of exciting careers in federal, state, and local governments; law; business; international organizations; non-profit organizations; campaign management and polling; journalism; education; electoral politics; research; and university and college teaching. In fact, any field that requires analytical and communication skills offers potential employment opportunities for Political Science students.

Department Course Offerings

POLS 1430	Introduction to Political Science . . . (3cr)
POLS 1435	American Government and Politics (3cr)
POLS 1439	State and Local Government (3cr)
POLS 2401	Federal Indian Policy (3cr)
POLS 2402	Tribal Government (3cr)
POLS 2450	International Relations (3cr)

PSYCHOLOGY

Department Description

Psychology is the study of behavior and mental processes. People sometimes think of psychology as the study of mental and emotional problems, or as psychotherapy, but the field is actually much broader than this. We use the scientific method to study human behavior in all its many forms, from the genetic level and the biological basis of behavior, to understanding how individuals and groups behave in everyday activities. Psychology includes the study of what we have in common with other human beings, such as how we learn and remember, along with what makes us unique individuals - our personalities. We study what makes people thrive and grow, as well as what might lead to problems.

The Psychology Department faculty has a wealth of experience in the teaching of psychology as well as practical experience working in the field, and they use this to enrich the classroom. Faculty members also maintain memberships in professional psychology organizations to stay up to date with research findings and developments in the field.

The Psychology Club is a student organization that takes on service projects on campus and in the community, and holds regular social events. Central Lakes College also has a chapter of Psi Beta, the national honor society for psychology students at two-year colleges.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative explanatory systems or theories.
- Identify and communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

General Psychology is a survey course that provides a broad introduction to the field of psychology. This course is also a prerequisite for some of the other psychology courses, such as Human Development and Abnormal Psychology.

Transfer Opportunities

Psychology courses fulfill several goal areas of the Minnesota Transfer Curriculum. Many students at CLC take courses in psychology, as the study of psychology is an excellent preparation for further study in numerous fields such as teaching, health care, social service, criminal justice and business.

Employment Opportunities

Psychology is an appropriate background for any job that involves working with other people. Psychology is also great for understanding and changing your own behavior, so personal interest often brings students to psychology classes.

Career Titles

Psychologist
Counselor
Behavior Analyst
Case Worker
Human Resources Director
Social Services Director
Customer Relations Worker
Research Analyst
Probation Officer
Manager

Department Course Offerings

PSYC 1411	Personal Growth & Behavior	(3cr)
PSYC 1420	Psychology & Modern Life	(3cr)
PSYC 2421	General Psychology	(4cr)
PSYC 2423	Honors General Psychology	(4cr)
PSYC 2425	Conflict, Trauma and Post Traumatic Stress Disorder	(3cr)
PSYC 2431	Human Development	(3cr)
PSYC 2441	Social Psychology	(3cr)
PSYC 2470	Abnormal Psychology	(3cr)
PSYC 2570	Topics in Psychology	(1-3cr)

READING



Special Department Information

To guide our students to be independent readers and thinkers, the Reading Department uses a variety of instructional activities including individual, collaborative, and whole class learning. At Central Lakes college, we recognize the various reading experiences and skill levels our students have. Therefore, we attempt to provide an atmosphere that fosters encouragement and acceptance of different ideas and opinions for optimum success.

Department Course Offerings

READ 0591	Reading I	(5cr)
READ 1404	College Reading	(3cr)
READ 1500	Reading II	(3cr)
RAED 1598	Topics in Reading	(4cr)

Department Description

The Reading Department at Central Lakes College offers a variety of classes in reading comprehension improvement, critical reading and thinking, vocabulary building, and study methods. It provides a range of class levels based on academic need, and the classes are designed to help students succeed personally, academically, and professionally.

Department Learning Outcomes

Students will be able to:

- Select reading strategies appropriate to the purpose and text structure.
- Independently read and respond to text in critical, creative, and emotional ways.
- Understand and identify the general sense/main idea of a paragraph or passage, supporting details, and author's patterns.
- Develop effective vocabulary-building techniques for reading fluency.

SOCIOLOGY



Department Description

Sociologists address the most pressing issues of our time: the gap between rich and poor, the breakup of families, crime, warfare, human migration and environmental challenges. Our scientific study of the groups and culture that we belong to is actually a study of ourselves...but from the outside-in! Sociological research often becomes social policy as local, state and federal governments seek to better organize their piece of our social world.

Department Learning Outcomes

Students will be able to:

- Identify and apply alternative Explanatory systems or theories.
- Identify and Communicate alternative explanations for contemporary social issues.
- Identify the methods and data that historians and social and behavioral sciences use to investigate the human condition.
- Examine social institutions and processes across a range of historical periods or cultures.

Special Department Information

Although no prerequisites exist for sociology classes at CLC, students are strongly encouraged to begin their adventure in sociology SOCL 1401 Intro to Sociology. This is the perfect jumping-off point to the higher-level sociology courses.

Transfer Opportunities

The understanding of humanity gained in sociology adds a unique insight to almost any field of study or occupation. In fact, sociology offerings are often required for degrees in several major disciplines. CLC sociology majors have a great reputation at our region's 4-year colleges like St. Cloud State University and Bemidji State University where our students have won high honors.

Employment Opportunities

A sociology degree is one of the most useful for students who enter the job market in middle management positions. High school social studies teachers often hold 4-year sociology degrees. Specialists in sociology are also employed in planning at all levels of government and at the United Nations. Several Nobel Prize winners in American history have been sociologists including Martin Luther King Jr., Jane Addams and Emily Balch. Many famous social activists earned sociology degrees: Saul Alinsky, Roy Wilkins, and Jesse Jackson. Popular artists and entertainers with sociology degrees include actor Robin Williams, novelist Saul Bellow, comedian Dan Aykroyd and sportscaster Ahmad Rashad. A substantial number of senators, congresspersons, mayors of major cities and other elected officials have held sociology degrees.

Department Course Offerings

SOCL 1401	Introduction to Sociology	(3cr)
SOCL 1403	Honors Introduction to Sociology	(3cr)
SOCL 1472	Sociology of the Family	(3cr)
SOCL 2405	Criminology	(3cr)
SOCL 2411	Social Problems	(3cr)
SOCL 2422	Culture & Environment	(3cr)
SOCL 2481	Race, Ethnicity & Oppression	(3cr)
SOCL 2599	Topics in Sociology	(1-3cr)

SPANISH



Department Description

Learning a second language has become a key educational component for career and personal enhancement in the global economy. Regardless of the major that you choose, adding Spanish will enhance your job opportunities and add to your scope of intercultural understanding as our country evolves demographically and linguistically. The CLC Spanish Department offers beginning and intermediate level language classes. Students are encouraged to meet with instructors or inquire about the CLEP test if uncertain about entry level of study.

Department Learning Outcomes

Students will be able to:

- Demonstrate appropriate class level oral or expressive World Language skills.
- Demonstrate knowledge and appreciation of cultural values, norms and traditions per specific World Language, and will demonstrate basic understanding that these differences have an impact on group relationships and interactions.
- Demonstrate appropriate class level receptive and/or written World Language skills.
- Demonstrate appropriate cultural rules of interaction when conversing in the target language.

Special Department Information

Students may elect to complete a certificate in Latin American Studies that will enrich their understanding and appreciation of Latin American culture, communication, language, music, and art. This program is appropriate for citizens in an increasingly diverse society and for individuals entering or currently employed in positions in education, business, criminal justice, and other occupations where an understanding of Hispanic culture enhances their abilities in the workplace. Students will have an opportunity to study the cultural, historical, political, economic, religious, and social realities of Mexico, Central, and South America to gain a better understanding of the Hispanic impact on the United States and the growing Latino population in Minnesota.

Employment Opportunities

Spanish is the second language of this country. Therefore, being bilingual will be a major asset in any career you choose to pursue.

Department Course Offerings

SPAN 1401	Beginning Spanish I	(4cr)
SPAN 1402	Beginning Spanish II	(4cr)
SPAN 1597	Topics in Spanish	(1-3cr)
SPAN 1598	Topics in Spanish	(1-3cr)
SPAN 2401	Intermediate Spanish I	(4cr)
SPAN 2402	Intermediate Spanish II	(2cr)
SPAN 2403	Interm Spanish: Reading, Writing, Speaking	(2cr)
SPAN 2420	Many Faces of Mexico	(3cr)

SPEECH



Department Description

The expectation of a college education is the skill to communicate effectively. Speech courses form a foundation necessary to reach this goal. The ability to understand the human communication process, through knowledge of its theories and application of these theories, prepares a student in his or her individual quest for success. The Speech Department at Central Lakes College offers interesting and challenging classes in public speaking, interpersonal communication, intercultural communication, small group communication, and other additional speech courses. This coursework provides a framework that will benefit students in the pursuit of their present and future goals.

Department Learning Outcomes

Students will be able to:

- Demonstrate oral communication skills.
- Demonstrate an understanding of intercultural communication and effectively communicate within and across different contexts and cultures.
- Demonstrate an understanding of the manner in which communication creates, maintains, and transforms relationships, and engage in effective and productive relational communication.

Transfer Opportunities

Speech courses fulfill a number of requirements for the Minnesota Transfer Curriculum, Central Lakes College graduation requirements, and readily transfer to four-year institutions.

Employment Opportunities

Learning more about the communication process can help you both professionally and personally. Communication is necessary in any career field. Effective communication skills will better prepare you for a more fulfilling work experience. These skills will also enhance your interpersonal relationships with friends, family, co-workers, and people in a variety of other contexts.

Career Titles

Public Speaker
 Speaking Coach
 Script and Speech Writer
 Speech Therapist
 Communication Consultant
 Public Relations Director
 Broadcaster Media Manager
 Teacher
 Administrator
 Counselor.

Department Course Offerings

SPCH 1410	Introduction to Communication Studies (3cr)
SPCH 1421	Interpersonal Communication . . . (3cr)
SPCH 1431	Fundamentals of Public Speaking (3cr)
SPCH 1450	Introduction to Mass Communication (3cr)
SPCH 1451	Argumentation and Debate (3cr)
SPCH 1464	Creative Communication (3cr)
SPCH 1470	Blogging and Vlogging (3cr)
SPCH 1472	Online Social Networking (3cr)
SPCH 2421	Intercultural Communication (3cr)
SPCH 2431	Small Group Communication (3cr)
SPCH 2470	Topics in Speech (3cr)
SPCH 2590	Service Learning (1-3cr)

THEATRE



Department Description

Onstage or backstage, students in the CLC Theatre Department have the opportunity to be heavily involved from their first day on campus. There are numerous classes in: performance (acting, directing, children's theatre, creative dramatics, improvisation) technical theatre and theatre studies (introduction to theatre, stage to screen, theatre history). Students have the opportunity to travel in-state or to New York or to London with travel study courses in The Theatre Experience.

What's learned in the classroom is taken directly to the stage with CLC Theatre's production program. The theatre serves as a cultural hub for the Brainerd Lakes area, and enjoys a 40+ year tradition of providing year-round theatre entertainment.

Department Learning Outcomes

Students will be able to:

- Demonstrate an understanding of the basic concepts of performance, not limited to these skills: proper stage terminology, basic movement, basic vocal production, and basic script analysis.
- Make thoughtful performance choices that reflect artistic, practical, and creative considerations.

- Demonstrate a basic understanding of the evolution of theatre from ancient Greek through contemporary times.
- Demonstrate a basic knowledge of the major historic and contemporary forms of dramatic literature, including representative playwrights and plays.
- Demonstrate a basic understanding of critical standards to be applied to the various elements of theatrical production.

Department Course Offerings

THTR 1430	You Tube is a Stage - Lights, Curtain, Action (3cr)
THTR 1432	Storytelling --Tell Old Ones, Write New Ones . . (3cr)
THTR 1441	Oral Interpretation of Literature (3cr)
THTR 1442	Improvisation (3cr)
THTR 1443	Stage to Screen: Plays That Become Movies . . (3cr)
THTR 1451	Introduction to Theatre (3cr)
THTR 1452	Stage Make-up (3cr)
THTR 1453	Theatre Costuming (3cr)
THTR 1455	Script Analysis (3cr)
THTR 1461	Acting I (3cr)
THTR 1462	Acting II (3cr)
THTR 1466, 1467	Acting Lab I, II (1cr)
THTR 1471, 1472	Theatre Production Lab I, II . . (1cr)
THTR 1478	Technical Theatre (3cr)
THTR 1480	The Theatre Experience (2cr)
THTR 1481	The Theatre Experience-New York (2cr)
THTR 1482	The Theatre Experience-London (2cr)
THTR 1483	Honors The Theatre Experience (3cr)
THTR 1496	Summer Theatre Workshop (3cr)
THTR 1597, 1598	Topics in Humanistic Theatre (1-3cr)
THTR 2410	Children's Theatre (3cr)
THTR 2441	Directing for the Theatre . . (3cr)
THTR 2443	Creative Drama with Children (3cr)
THTR 2450	Theatre History (3cr)
THTR 2466, 2467	Acting Lab III, IV (1cr)
THTR 2471, 2472	Theatre Production Lab III, IV (1cr)
THTR 2480	Theatre for a Diverse Population (3cr)
THTR 2491	Theatre Independent Study (1-3cr)

THEATRE PERFORMANCE

Career Description

Theatre performance involves professional acting on stage, in motion pictures, video presentations, and other capacities as part of the entertainment industry and commercial as well as non-profit enterprises. It is a creative occupation calling upon a variety of dramatic expression and techniques to communicate with audiences. The theatrical industry is a highly competitive field and demanding but can be very rewarding. To succeed, one needs talent, training, and personality. It helps to be a quick learner, flexible, be disciplined and determined, enthusiastic and have a high level of fitness and stamina. You must be able to work successfully within a team and be prepared to travel, possibly overseas.

Program Information

The Associate Fine Arts degree is intended for students who wish to pursue a Bachelor of Arts in Theatre from a four-year university or college. The degree can also be used as a bridge into Bachelor of Fine Arts degree programs. The A.F.A. degree includes courses in acting, technical theatre, makeup, costuming, script analysis, and lab courses in acting and production. In addition, the 60-credit degree includes general education electives.

Program Learning Outcomes

Students will be able to:

- Communicate and function effectively in theatre performance environments as well as demonstrate an understanding of basic theatre performance direction, as well as its theory and application.
- Demonstrate a working knowledge of technical theatre components, such as lighting, sound, safety, theatre costume design, stage make-up and construction.
- Demonstrate competencies in standard theatre voice and movement techniques as well as demonstrate competence in basic acting techniques and audition competently for acting roles.

Transfer Opportunities

There is an articulation agreement between CLC and Southwest Minnesota State Uni-

versity at Marshall, Minn., which will allow A.F.A. degree students to transfer into the SMSU theatre program with junior class standing. Articulation agreements with other universities are being sought.

Employment Opportunities

Possible career options with the bachelor's degree include education, professional performance as an actor, professional work in a technical theatre capacity (design, construction, and stage management), and professional work in arts management. Other career fields which would be served by this degree include sales, public relations, customer service, ministry, motivational speaking, and law. The B.F.A. degree's career options are mainly in the realm of professional theatre work, either as a performer or a designer.

Career Titles

Actor, director, teacher, professor, designer, technician, production manager, stage manager, shop supervisor, technical director, salesperson, minister, motivational speaker, lawyer, customer service specialist, drama therapist, cruise ship performer.

A.F.A. Curriculum

First Year - Fall Semester

THTR 1455	Script Analysis	.....	(3cr)
THTR 1461	Acting I	.....	(3cr)
General Education		.....	(10cr)

Total 16 Credits

Spring Semester

THTR 1452	Stage Make-up	.....	(3cr)
THTR 1462	Acting II	.....	(3cr)
General Education		.....	(9cr)

Total 15 Credits

Second Year - Fall Semester

THTR 1478	Technical Theatre	.....	(3cr)
General Education		.....	(10cr)

Total 13 Credits

Spring Semester

THTR 1453	Theatre Costuming	.....	(3)
General Education		.....	(11cr)

Total 14 Credits

Student must complete two labs in either acting or theater production. These courses can be taken any semester. 2 credits.

GRADUATION REQUIREMENT 60 CREDITS

This suggested sequence is for full-time students. Part-time students will need more time to complete the program.



CAREER TECHNICAL PROGRAMS

ACCOUNTING



Career Description

Many accountants and accounting technicians work in certified public accounting firms that perform tax and auditing services but the majority work as management or “private” accountants. Many accountants have their own business as well. The role of the accounting department has expanded greatly. Accountants and accounting technicians help organizations make wise decisions by preparing and analyzing a variety of financial and non-financial information. They manage the assets of the business and ensure the records of the business comply with the law. Accounting staff are critical in the fight to cut waste and fraud, and “forensic accountants” work directly with law enforcement to keep financial systems clean. Accountants use special accounting and finance software, and in small businesses the accountant is often the computer expert.

Program Information

Central Lakes College offers a 60-credit, two-year Accounting Associate in Applied Science (A.A.S.) Degree. The A.A.S. degree prepares students by teaching the analytical and technical skills needed for an accounting or financial management career. Students gain experience recording transactions, preparing and analyzing financial reports, and doing realis-

tic simulations on the most popular accounting computer systems. CLC also offers a one-year Accounting Diploma (32 credits) that includes most courses from the first year of the A.A.S. degree. Graduates of this program will have the background to perform entry-level accounting duties such as accounts payable, accounts receivable or payroll.

Program Learning Outcomes

Graduates will be able to:

- Prepare classified general purpose financial statements in good form
- Analyze financial and business information to support planning and decision making
- Apply accounting principles to business transactions in both a manual and a computerized environment
- Prepare federal and state individual tax forms with accompanying schedules in proper form
- Perform a Cost Volume Process (CVP) sensitivity analysis to evaluate business decisions
- Apply ethical principles in decision making
- Demonstrate effective communication skills

Certifications

Bookkeeper Certification: A certified bookkeeper exam is offered by the American Institute of Professional Bookkeepers. This exam covers normal accounting practices of the typical business. This exam can be taken after completing a two-year accounting degree. **Registered Accounting Practitioner:** The State of Minnesota offers two levels of licensure for accountants. The Registered Accounting Practitioner (RAP) certification requires a two-year accounting degree and authorizes the licensee to perform but not supervise all accounting services on a formal audit. **Certified Public Accountant:** The (CPA) license requires five years of college education. CPAs are authorized to perform all accounting services and can supervise audits.

ACCOUNTING

Admissions

The two-year accounting degree is offered as a full-time day program, but approximately 60% the degree can be completed in evening and web-based courses.

Transfer Opportunities

At CLC students can complete all pre-business core courses required for a four-year accounting degree. Courses transfer to most four-year colleges in Minnesota. Consult with the Counseling Department to get transfer information on a specific four-year college. The A.A.S. two-year degree in accounting is not intended for transfer. Our graduates often go directly to work.

Employment Opportunities

Businesses are being held to a higher standard of financial reporting. This has expanded the demand for accountants, financial analysts and auditors. The CLC accounting staff receives many notices of job openings that result in placement for our accounting students.

A.A.S. Curriculum

First Year - Fall Semester

ACCT 2011	Accounting Principles I	(4cr)
ACCT 2111	Accounting Principles I Lab	(1cr)
ACCT 2140	Accounting Information Systems	(3cr)
BUSN 1131	Business Math	(3cr)
General Education		(3cr)

Fall Semester Total 14 Credits

Spring Semester

ACCT 2012*	Accounting Principles II	(4cr)
ACCT 2112	Accounting Principles II Lab	(1cr)
ACCT 2114	Payroll Accounting	(3cr)
ACCT 2138*	Computerized Accounting Software	(4cr)
General Education		(4cr)

Spring Semester Total 16 Credits

Second Year - Fall Semester

ACCT 2121*	Intermediate Accounting I	(4cr)
ACCT 2165*	Income Tax	(4cr)
BUSN 2541	Legal Environment of Business	(3cr)
General Education		(5cr)

Fall Semester Total 16 Credits

Spring Semester

ACCT 2123*	Intermediate Accounting II	(4cr)
ACCT 2161*	Cost Accounting I	(3cr)
ACCT 2170*	Fed & St tax updates using software	(1cr)
Additional Related Course Credits		(3cr)
General Education		(3cr)

Spring Semester Total 14 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Diploma Curriculum

Fall Semester

ACCT 2011	Accounting Principles I	(4cr)
ACCT 2111	Accounting Principles I Lab	(1cr)
ACCT 2140	Accounting Information Systems	(3cr)
BUSN 1131	Business Math	(3cr)
BUSN 2541	Legal Environment of Business	(3cr)
COMP 1120	Intro to Computer Applications	(3cr)

Fall Semester Total 17 Credits

Spring Semester

ACCT 2012*	Accounting Principles II	(4cr)
ACCT 2112	Accounting Principles II Lab	(1cr)
ACCT 2114	Payroll Accounting	(3cr)
ACCT 2138*	Computerized Accounting Software	(4cr)
BUSN 1166	Business Communications	(3cr)

Spring Semester Total 15 Credits

GRADUATION REQUIREMENT 32 CREDITS

*Denotes Prerequisites

Bookkeeping Certificate

Curriculum

Fall Semester

ACCT 2011	Accounting Principles I	(4cr)
ACCT 2111	Accounting Principles I Lab	(1cr)
BUSN 1131	Business Math	(3cr)

Fall Semester Total 8 Credits

Spring Semester

ACCT 2012*	Accounting Principles II	(4cr)
ACCT 2112	Accounting Principles II Lab	(1cr)
ACCT 2114	Payroll Accounting	(3cr)
ACCT 2138*	Computerized Accounting Software	(4cr)

Spring Semester Total 12 Credits

GRADUATION REQUIREMENT 20 CREDITS

*Denotes Prerequisites

ADMINISTRATIVE ASSISTANT



Career Description

Administrative assistants perform a variety of administrative tasks in support of managers and others in an organization including duties once reserved solely for managers. Successful administrative assistants must be highly organized and possess excellent computer, writing and communication skills. Knowledge of a variety of office equipment and 21st century office procedures is vital. Administrative assistants may perform research, create spreadsheets, compose correspondence, manage databases, generate reports, and create presentations. Various positions may also require handling travel arrangements, maintaining inventories and planning and scheduling meetings and appointments. Administrative assistants will also manage electronic and paper communications and files.

Program Information

The Administrative Assistant Associate in Applied Science (A.A.S) Degree program prepares graduates by introducing them to a wide variety of subjects that will prepare them to manage and organize themselves and their workplace environment. In addition this program prepares the student to acquire comprehensive skills and assume responsibilities in the workplace. Students will have advanced training with computer technology that will

prepare the student for the constantly changing and increasingly automated business environment. The A.A.S. degree combines expert technical and business instruction with a well-balanced academic background. The program will prepare the student in skill sets such as computer applications, communication, teamwork and collaboration, customer focus, problem-solving and critical thinking, professionalism, productivity, ethics, and leadership along with business qualities. Students are also prepared to train and supervise lower-level support staff. The 33-credit Administrative Support diploma prepares students for support staff positions position such as a receptionist or other office or clerical jobs.

Program Outcomes

Graduates will be able to:

- Read, understand, and prepare standard types of business documents
- Possess appropriate technological skills including: operating systems, word processing (including keyboarding), spreadsheets, database management and the Internet as a research tool
- Use appropriate office procedures as related to records information management, telephone communications, and mail management
- Produce accurate business documents and reports using computer technology and applying appropriate editing and language skills
- Understand and perform office accounting and recordkeeping functions as related to a service business, including computerized applications
- Demonstrate effective interpersonal skills in a business environment in order to complete individual and team projects

Certification

This program would help prepare students for the Microsoft Office Specialist (MOS) certificates Microsoft Word, Excel, Powerpoint, Outlook and Access. Other certifications and memberships are available, including those

ADMINISTRATIVE ASSISTANT

through the International Association of Administrative Professionals (IAAP).

Admissions

The program is offered on the Brainerd Campus, but a portion of the courses can be completed online.

Employment Opportunities

Administrative Assistants are employed in organizations of every type, but most are employed in service providing industries ranging from education and health care to government and retail trade. Others may work in firms engaged in manufacturing or construction.

Career Titles

Administrative Assistant, Executive Assistant, Office Assistant, Secretary, Administrative Clerk, Receptionists, Human Resource Assistants.

Administrative Support Diploma Curriculum

Fall Semester

BUSN 1102	Accounting for Non-accountants	(3cr)
BUSN 1131	Business Math	(3cr)
COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1131	Microsoft Word Comprehensive	(4cr)
COMP 1135	Microsoft Excel Comprehensive	(4cr)

Fall Semester Total 17 Credits

Spring Semester

ADMN 1120*	Administrative Support Applications	(3cr)
ADMN 1125*	Business English Skills	(3cr)
BUSN 1166	Business Communications	(3cr)
COMP 1134	Microsoft Outlook Comprehensive	(1cr)
MKTG 1162	Customer Relations	(3cr)
SECM 1302	Championship Typing	(3cr)

Spring Semester Total 16 Credits

GRADUATION REQUIREMENT 33 CREDITS

*Denotes Prerequisite

Administrative Assistant

A.A.S. Curriculum

First Year - Fall Semester

BUSN 1131	Business Math	(3cr)
COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1131	Microsoft Word Comprehensive	(4cr)
COMP 1135	Microsoft Excel Comprehensive	(4cr)

Fall Semester Total 14 Credits

Spring Semester

ADMN 1120*	Administrative Support Applications	(3cr)
ADMN 1125*	Business English Skills	(3cr)
BUSN 1166	Business Communications	(3cr)
COMP 1133	Microsoft PowerPoint Comprehensive	(3cr)
COMP 1134	Microsoft Outlook Comprehensive	(1cr)
SECM 1302	Championship Typing	(3cr)

Spring Semester Total 16 Credits

Second Year - Fall Semester

BUSN 1102	Accounting for Non-accountants	(3cr)
MGMT 1110	Frontline Leadership	(3cr)
General Education		(9cr)

Fall Semester Total 15 Credits

Spring Semester

ADMN 2110*	Administrative Assistant Capstone	
OR		
ADMN 2150	Internship	(3cr)
MGMT 1114	Human Resource Management	(3cr)
MKTG 1162	Customer Relations	(3cr)
General Education		(6cr)

Spring Semester Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisite

BUSINESS MANAGEMENT



Career Description

All businesses need effective leadership to succeed. The management team is responsible for providing that leadership. Managers must plan, organize, direct, and control the business operations with the ongoing challenge of earning a profit in a highly competitive global marketplace. Strong communication, problem solving, and team building skills are critical traits of successful managers.

Program Information

Business management degrees continue to lead the nation as the number one choice of study in higher education. Students in the Associate of Applied Science Business Management Program receive hands-on, skill-based business training with the opportunity to specialize in entrepreneurship, supervision, sales and marketing.

Program Learning Outcomes

Graduates will be able to:

- Recognize ethical, legal and socially responsible business practices
- Perform financial management tasks.
- Demonstrate effective written and oral business communications.
- Utilize software for business applications.
- Develop interpersonal leadership skills.

- Access, analyze, and interpret relevant information specific to business strategies

Admissions

Central Lakes College has Advanced Standing Articulation (or “Tech Prep”) agreements with area high schools. Contact the CLC Registrar to identify individual Tech Prep business courses your high school offers for college credit.

Employment Opportunities

Business management graduates have found employment opportunities in financial institutions, retail and commercial trade, marketing, professional sales, restaurants, hotels/resorts, insurance, healthcare, and manufacturing. In addition, graduates have started their own businesses or managed family businesses.

Business Management

A.A.S. Curriculum

Required Courses

BUSN 1102	Accounting for Non-Accountants . . .	(3cr)
BUSN 1131	Business Math	(3cr)
BUSN 1166	Business Communications	(3cr)
BUSN 2541	Legal Environment of Business	(3cr)
COMP 1121*	Advanced Computer Applications .	(3cr)
MGMT 1011	Management Principles	(3cr)
MGMT 1101	Entrepreneurship	(3cr)
MGMT 1108	Quality & Performance Management	(3cr)
MGMT 1110	Frontline Leadership	(3cr)
MGMT 1114	Human Resource Management . . .	(3cr)
MGMT 1126*	Financial Management	(3cr)
MKTG 1011	Marketing Principles	(3cr)
MKTG 1162	Customer Relations	(3cr)
MKTG 1164	International Business	(3cr)
MKTG 1168	Professional Sales	(3cr)

Total 45 Credits

General Education

Student must complete the requirements listed in the A.A.S. Degree/General Education Transfer Curriculum document.

Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

ENTREPRENEURSHIP

Career Description

The opportunity to own a small business has been the American dream for many over the past century. Small businesses employ over half of all private sector employees and have generated 64 percent of net new jobs over the past 15 years. Small businesses have a presence in virtually every industry and occupation.

Owners of small businesses often apply both technical knowledge and skills along with business management knowledge to create and operate a successful business venture. The Minnesota Department of Employment and Economic Development's recent data show a higher increase in new business starts in non-urban and rural areas of the state. Several initiatives promote and create growth of entrepreneurial activity in Greater Minnesota. Investing in small business development promotes the economic growth and vitality of the region.

Program Information

This program emphasizes the innovative and entrepreneurial skills required to succeed in the current business environment of continuous and unprecedented change. The ability to be responsive, flexible and creative lies at the heart of both new venture creation and ongoing businesses because each must anticipate, innovate and adapt in a rapidly changing world. The Entrepreneurism Certificate program is designed for those who are considering starting a business or current entrepreneurs who need the vital skills required to be a successful entrepreneur.

Students experience all aspects of planning a new venture, from determining their personal vision to conducting market analysis to testing financial feasibility, drawing from the whole spectrum of business and management. The Entrepreneurship Certificate demonstrates why good planning leads to successful business performance. Students gain insight in how the various pieces of the business puzzle fit together for the venture to operate successfully.

Program Learning Outcomes

Graduates will be able to:

- Perform financial management tasks
- Demonstrate effective written and oral business communications
- Access, analyze, and interpret relevant information specific to business strategies
- Create a business plan

Employment Opportunities

Completion of the program will provide the knowledge and skills necessary to successfully start and operate a small business. Students will also have the opportunity to work with the Small Business Development Center located on campus to develop successful business plans.

Entrepreneurship Certificate Curriculum

Required Courses:

BUSN 1102	Accounting for Non-Accountants . . .	(3cr)
BUSN 1166	Business Communications	(3cr)
MGMT 1101	Entrepreneurship	(3cr)
MGMT 1150*	Entrepreneurship Capstone	(1cr)
MKTG 1011	Marketing Principles	(3cr)

Total 13 Credits

Elective:

Student must choose an additional 3 credits from any of the courses with a BUSN, COMP, MKTG, or MGMT prefix.

Total 3 Credits

GRADUATION REQUIREMENT 16 CREDITS

HOSPITALITY CAREERS



Hospitality Certificate Curriculum

Required Courses

MKTG 1160	Hotel & Resort	(2cr)
MGMT 1312*	Business Management Internship	(1-3cr)
MKTG 1162	Customer Relations	(3cr)
Total 6-8 Credits		
	Electives	2-4 Credits

GRADUATION REQUIREMENT 10 CREDITS

*Denotes Prerequisite

Career Description

The hospitality industry is one of the oldest in the world. Today's combined hospitality industry ranks third in size among the nation's industries; it is complex and diverse, requiring skilled professionals.

Unprecedented growth in the service economy has created demand for hospitality business leaders in hotels, resorts, clubs, contract food services, major national and international airlines, public institutions, restaurants, country clubs, professional and trade associations, major travel agencies, and other venues that focus on hospitality.

This certificate provides entry-level skills for immediate employment at local resorts. An Associate in Science Degree is under development.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate knowledge of, and relationship between, functional areas of hospitality
- Effectively communicate with internal and external customers

MEDICAL ADMINISTRATIVE SECRETARY

Career Description

Medical administrative secretaries use their knowledge of medical terms and procedures to perform a variety of tasks needed to run a medical office. They may, for example, transcribe dictation; work in insurance, billing, and coding departments; answer phones and pull charts.

Program Information

The 32-credit Medical Secretary Diploma Program and 64-credit Medical Secretary Associate of Applied Science (A.A.S.) Program prepare the graduate to provide patient service in the healthcare setting. Instructors teach anatomy terminology as well as office procedures, records management, and machine transcription. The one-year program equips graduates with the tools to be an effective receptionist, efficient insurance claims processor, accurate biller, and organized patient file-keeper. The two-year graduate gets deeper into the skills and adds general education knowledge to increase value to one's academic foundation. The degree establishes credibility for consideration in a supervisory position or specialization in focus jobs requiring expert transcription or management proficiency. It also prepares students for a higher degree in coding and health management.

Program Learning Outcomes

Graduates will be able to:

- Correctly spell, define, and pronounce medical terminology
- Utilize computers, health care software applications and other technologies
- Perform medical secretary/administrative responsibilities which provide optimal services to patient and employer
- Demonstrate critical thinking and problem-solving skills
- Demonstrate effective listening, written and oral communication skills
- Model professional and ethical behaviors, especially confidentiality and compassion

Admissions

The A.A.S. degree and diploma are offered as full-time programs. Students can start at the beginning of either Fall or Spring semester.

Career Titles

This program will help students prepare for a wide range of careers, including the following: medical secretary, medical transcriptionist, data transcriber, medical administrative specialist, medical biller, medical office secretary, patient accounts manager/assistant, medical office specialist, medical terminologist, department supervisor, patient account representative, and verification specialist.

Employment Opportunities

Employment opportunities exist in hospitals, medical clinics, chiropractic offices, optical clinics, specialty clinics, nursing and rehabilitation facilities, public health departments, social services, insurance offices, and medical supply firms.

MEDICAL ADMINISTRATIVE SECRETARY

Medical Administrative Secretary General Emphasis

A.A.S. Curriculum

First Year - Fall Semester

SECM 1140	Health Care Delivery Systems	(3cr)
SECM 1142	Healthcare Information Systems . .	(3cr)
SECM 1160	Medical Secretary Anatomy/ Physiology I	(3cr)
SECM 1163	Medical Office Procedures	(3cr)
SECM 1165	Medical Records Management	(3cr)
SECM 1360	Medical Terminology	(3cr)

Total 18 Credits

Spring Semester

BUSN 1166	Business Communications	(3cr)
SECM 1144*	Medical Secretary Pharmacotherapy	(2cr)
SECM 1150	Intro to DX and Procedure Coding	(3cr)
SECM 1161*	Medical Secretary Anatomy/ Physiology II	(3cr)
SECM 1166*	Medical Transcription I	(3cr)

Total 14 Credits

Second Year - Fall Semester

Classes listed with a		
SECM, MGMT, MKTG, or COMP prefix		(8cr)
General Education		(7cr)

Total 15 Credits

Spring Semester

SECM 2172*	Reimbursement Methodologies . . .	(2cr)
Classes listed with a		
SECM, MGMT, MKTG, or COMP prefix		(8cr)
General Education		(3cr)
General Education		(8cr)

Total 13 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Medical Secretary Diploma Curriculum

Fall Semester

SECM 1140	Health Care Delivery Systems	(3cr)
SECM 1142	Healthcare Information Systems . .	(3cr)
SECM 1160	Medical Secretary Anatomy/ Physiology I	(3cr)
SECM 1163	Medical Office Procedures I	(3cr)
SECM 1165	Medical Records Management	(3cr)
SECM 1360*	Medical Terminology	(3cr)

Total 18 Credits

Spring Semester

BUSN 1166	Business Communications	(3cr)
SECM 1144	Medical Secretary Pharmacotherapy	(2cr)
SECM 1150*	Intro to DX & Procedure Coding . . .	(3cr)
SECM 1161*	Medical Secretary Anatomy/ Physiology II	(3cr)
SECM 1164*	Medical Office Procedures II	(3cr)

Total 14 Credits

GRADUATION REQUIREMENT 32 CREDITS

*Denotes Prerequisites

COMPUTER INFORMATION TECHNOLOGY



Career Description

Information technology (IT) specialists work together to improve existing computer systems and support end user technologies in an organizational setting. They help plan and develop new systems, install hardware, install software, support end user training and troubleshoot systems. Computers are not “one size fits all,” especially when it comes to business. Different companies have different needs. An IT specialist uses skills from multiple areas to plan, configure, repair or troubleshoot end user systems and even server-based systems. IT specialists work closely with network administrators and engineers in larger organizations and carry out the day to day troubleshooting, upgrading and repair of client systems. In smaller organizations, IT specialists will likely be responsible for all of these functions.

Program Information

IT specialists are in high demand. The Information Technology Specialist Program will help prepare graduates by introducing them to a wide variety of subjects in information and emerging technologies that they will encounter in the field. Subjects covered include computer troubleshooting and repair, basic networking, operating systems, supporting common end user applications, as well as

soft skills like oral and written communication and customer service. The curriculum is delivered using currently released industry software including OS, NOS and applications. This program teaches skills needed to work for companies with small to mid-size help desks or large corporate user support centers. Instructors are industry certified professionals with years of experience in the classroom and industry. There is 100% placement of our graduates within the IT field.

Program Learning Outcomes

Graduates will be able to:

- Perform computer information technology practices and procedures required for entry to mid-level employment
- Perform computer information technology entry to mid-level skill sets and apply theoretical principles
- Install, manage, configure and use functions and features of current releases of operating systems, network operating systems and applications
- Install, troubleshoot and repair computer equipment and peripherals
- Test successfully on competencies required to pass industry certification exams
- Locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional
- Evaluate, identify and apply appropriate security standards
- Communicate effectively with technical and non-technical audiences

Certification

This program will help students prepare for the following certifications: Microsoft MCP and MCDST; Comp TIA A+, Network+, Server+, Security+, Help Desk 2000 CHDP, Help Desk Institute CSS and HDA, and others. Central Lakes College is a VUE Authorized Test Center. All certification exams can be delivered onsite.

COMPUTER INFORMATION TECHNOLOGY

Career Titles

This program will help students prepare for a wide range of careers in the IT field, including the following: computer support technician, computer technologist, help desk technician, information technology specialist, IT analyst, Microsoft certified professional, network support technician, PC support specialist, technical support analyst and technical support manager.

Computer Information Technology A.A.S. Curriculum

First Year - Fall Semester

COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1120	Introduction to Computer Applications	(3cr)
COMP 1204	Computer Repair I-A+ Hardware . .	(4cr)
General Education		(5cr)

Total 15 Credits

Spring Semester

COMP 1121	Advanced Computer Applications	(3cr)
COMP 1230*	Network Essentials	(4cr)
COMP 1253	Client Operating Systems Administration	(4cr)
COMP 1206*	Computer Repair II-A+ Operating System	(3cr)
General Education		(1cr)

Total 15 Credits

Second Year - Fall Semester

COMP 2160	Ethics in Information Technology .	(2cr)
COMP 2202	Computer User Support	(3cr)
COMP 2107	Supporting Client Operating Systems	(3cr)
COMP 2222	Introduction to Visual Basic and Scripting	(3cr)
General Education		(4cr)

Total 15 Credits

Spring Semester

COMP 2111	Security Essentials	(4cr)
COMP 2127	Hardware/Software Evaluation . . .	(2cr)
COMP 2220	Introduction to Programming	(4cr)
General Education		(5cr)

Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites or Co-prerequisites

Recommended Elective

COMP 1398	Topics in Computer Technology . .	(2cr)
COMP 2113	Advanced Operating Systems-Command Line	(3cr)
COMP 2213*	Computer Careers Internship	(1-6cr)

COMPUTER NETWORK ADMINISTRATION

Career Description

Computer network administrators design, install, and support an organization's network infrastructure. They may also plan, coordinate, and direct the computer-related activities of an organization, making sure all parts of a computer network work to meet the organization's goals. Finally, computer network administrators provide day-to-day support for software users and direct the work of other computer specialists such as analysts, programmers, and technicians.

Program Information

The Associate of Applied Science (A.A.S.) Computer Network Administration Program is an exciting track offered by Central Lakes College. Coursework includes general networking technologies, network troubleshooting, operating system technologies, disaster recovery, computer repair, and security fundamentals. This program covers an overview of networking technologies that graduates can expect to work with in small to mid-size organization settings and delivers curriculum using current industry software, including Operating System (OS), Network Operating System (NOS) and other applications. CLC's information technology (IT) instructors are industry certified professionals with multiple years of experience in their respective disciplines both in the classroom and in industry. There is 100% placement of our graduates within the IT field.

Program Learning Outcomes

Graduates will be able to:

- Perform computer information technology practices and procedures required for entry to mid-level employment
- Perform computer information technology entry to mid-level skill sets and apply theoretical principles
- Install, manage, configure and use functions and features of current releases of operating systems, network operating systems and applications
- Install, troubleshoot and repair computer equipment and peripherals
- Test successfully on competencies required

to pass industry certification exams

- Locate, evaluate and properly utilize the tools and resources appropriate to a computer technology professional
- Evaluate, identify and apply appropriate security standards
- Communicate effectively with technical and non-technical audiences

Certification

This program will help students prepare for the following certifications: Microsoft Certified Systems Engineer (MCSE), Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Professional (MCP), Microsoft Certified Desktop Support Technician (MCDST), CompTIAA+, Network+, Server+, Security+, and others. Central Lakes College is a VUE Authorized Test Center. All certification exams can be delivered on-site.

Career Titles

This program will help students prepare for careers in networking such as MCSE, MCSA, network administrator, network engineer, systems analyst, local area network (LAN) administrator, wide area network (WAN) administrator, network security specialist and systems engineer.

COMPUTER NETWORK ADMINISTRATION

Computer Network Administration

A.A.S. Curriculum

First Year - Fall Semester

COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1120	Introduction to Computer Applications	(3cr)
COMP 1204	Computer Repair I - A+Hardware..	(4cr)
General Education	. . . . .	(5cr)

Total 15 Credits

Spring Semester

COMP 1230	Network Essentials	(4cr)
COMP 1253	Client Operating Systems Administration	(4cr)
COMP 1206*	Computer Repair II-A+ Operating Systems	(3cr)
General Education	. . . . .	(4cr)

Total 15 Credits

Second Year - Fall Semester

COMP 2118	Server Administration (4cr)	
COMP 2119	Network Infrastructure (4cr)	
COMP 2113	Adv Operating Systems/Command Line	(3cr)
General Education	. . . . .	(4cr)

Total 15 Credits

Spring Semester

COMP 2111	Security Essentials	(4cr)
COMP 2120	Network Planning and Design	(4cr)
COMP 2121	Directory Services Infrastructure	(4cr)
COMP Course Elective	. . . . .	(1cr)
General Education	. . . . .	(2cr)

Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites or Co-requisites

Recommended Elective

COMP 2213*	Computer Careers Internship	(1-6cr)
COMP 1398	Topics in Computer Technology	(1cr)
COMP 2220	Introduction to Programming	(4cr)
COMP 2222	Introduction to Visual Basic & Scripting	(3cr)

COMPUTER SUPPORT SPECIALIST



Career Description

Computer support specialists are in high demand. They help people solve problems with their computer hardware and software. They help coworkers or people who bought their company's products troubleshoot the problem to determine whether to make repairs or make changes to the computer setup. Computer support specialists may read technical manuals to help determine the problem, test computers to make sure they work, and help determine a company's computer needs. At larger companies, specialists may teach staff how to use new software. A computer support specialist who works with customers may teach customers how to install software or hardware or how to use the software purchased.

Program Information

The Computer Support Specialist Program will help prepare graduates by introducing them to a wide variety of subjects in information and emerging technologies that they will encounter in the field. Subjects covered include computer troubleshooting and repair, basic networking, operating systems, supporting common end-user applications, as well as soft skills like oral and written communication and customer service.

This program teaches skills needed to work for companies with small to mid-size help desks or large corporate user support centers. Our program delivers curriculum using currently released industry software, including Operating System (OS) and Network Operating System (NOS), and the instructors are industry certified professionals with years of experience in the classroom and industry. There is 100% placement of our graduates within the information technology (IT) field.

Program Learning Outcomes

Graduates will be able to:

- Perform computer information technology practices and procedures required for entry to mid-level employment
- Perform computer information technology entry to mid-level skill sets and apply theoretical principles
- Install, manage, configure and use functions and features of current releases of operating systems, network operating systems and applications
- Install, troubleshoot and repair computer equipment and peripherals
- Evaluate, identify and apply appropriate security standards
- Communicate effectively with technical and non-technical audiences

Certification

This program will help students prepare for the following certifications: Microsoft Certified Professional (MCP) and Microsoft Certified Desktop Support Technician (CDST), Comp TIA A+, and others. Central Lakes College is a VUE Authorized Test Center. All certifications exams can be delivered on-site.

Career Titles

The studies in this program will help students prepare for careers in computer support, including computer support specialist, computer repair technician, computer operator, and help desk worker.

COMPUTER SUPPORT SPECIALIST

Employment Opportunities

The need for qualified IT professionals continues to grow. Computer support specialist careers are the fastest growing occupations in Minnesota and across the country.

Computer Support Specialist Diploma Curriculum

Fall Semester

COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1120	Introduction to Computer Applications	(3cr)
COMP 2202*	Computer User Support	(3cr)
COMP 1204	Computer Repair I-A+ Hardware . .	(4cr)
COMP 2107	Supporting Client Operating Systems	(3cr)

Total 16 Credits

Spring Semester

COMP 1121	Advanced Computer Applications .	(3cr)
COMP 1206*	Computer Repair II-A+ Operating Sys	(3cr)
COMP 1230	Network Essentials	(4cr)
COMP 1253	Client Operating Systems Administration	(4cr)

Total 14 Credits

GRADUATION REQUIREMENT 32 CREDITS

*Denotes prerequisites or co-requisites

Recommended Elective

COMP 2213*	Computer Careers Internship. . . .	(1-6cr)
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Help Desk Specialist Certificate Curriculum

Required Courses

COMP 2214*	Help Desk Internship I	(5cr)
COMP 2216*	Help Desk Internship II	(5cr)

Total 10 credits

GRADUATION REQUIREMENT 10 CREDITS

*Denotes prerequisites

This program is an advanced internship designed as an add on to the Computer Support Specialist Diploma. Students must complete at least 540 hours of internship in a work environment comprised of software support, PC repair, training, and general networking support.

Microsoft Office Specialist Certificate Curriculum

This program is designed to teach students to become proficient and expert users in the Microsoft Office Suite of application programs including Word, Access, Excel, PowerPoint and Outlook. The skills learned are designed to help office managers, technicians, administrative support personnel, and organization users of the Microsoft Office Suite become application specialists. Students learn desktop application operating skills to meet globally recognized standards.

Fall or Spring Semester

COMP 1109	Introduction to Operating Systems	(3cr)
COMP 1131	Microsoft Word Comprehensive . . .	(4cr)
COMP 1132	Microsoft Access Comprehensive	(4cr)
COMP 1133	Microsoft PowerPoint Comprehensive	(3cr)
COMP 1143	Microsoft Outlook Comprehensive . .	(1cr)
COMP 1135	Microsoft Excel Comprehensive . . .	(4cr)

Total 19 credits

GRADUATION REQUIREMENT 19 CREDITS

COMP 1109 Introduction to Operating Systems should be taken at the beginning of the sequence of courses. It can be taken simultaneously with any of the other courses. Students in this program should have the prerequisite skills from course COMP 1109 - Introduction to Operating Systems or considerable end-user experiences using one of the Microsoft operating systems such as Windows XP, Windows Vista or Windows 7.

FLORAL DESIGN

Career Description

Floral designers provide a variety of products and services to the public. Products include floral arrangements for all occasions, blooming and foliage plants, and accessory gift items. Services include the care of plants and flowers, interior decorating, and providing consultation for weddings and other special occasion. People who enjoy art, working with and serving others, as well as those who enjoy growing and working with living plants and flowers will benefit from the Floral Design Program.

Program Information

The Floral Design Program prepares students for a wide variety of challenging and profitable careers. Students will learn to design traditional and contemporary flower arrangements; work with fresh, silk, and dried flowers; and identify and care for flowering plants, foliage plants, and fresh flowers and greens.

Program Learning Outcomes

Graduates will be able to:

- Identify and practice safe use of tools, equipment and supplies used in horticulture careers
- Identify regional and Minnesota plants by common name, genus and species
- Identify and prescribe sustainable options in horticulture which benefit the environment while maintaining productivity and economic viability
- Design and apply principles of design and color theory to create floral arrangements used in retail floral trade such as wedding decor, sympathy tributes, window display, permanent botanicals and event designs.
- Apply effective communication and interpersonal skills with co-workers, supervisors, suppliers and customers

Admissions

The Floral Design Program is offered as a full-time day program. Because of the sequencing of courses, it is best to begin this program Fall semester.

Transfer Opportunities

Many horticulture courses can be transferred to a variety of four-year colleges and universities. Because each college has its own requirements, always check with an advisor or counselor about transferability of specific courses to these other colleges.

Career Titles

This program will help students prepare for a wide range of careers, including floral designer, flower shop sales, wholesale flower sales, flower broker, flower shop owner/manager, plant rental, interior plant maintenance, free-lance designer, and floral supply representative.

Employment Opportunities

Job opportunities include employment in retail flower shops, wholesale floral supply companies, and interior landscaping firms.

Floral Design

Diploma Curriculum

Fall Semester

HORT 1104	Plant Science	(4cr)
HORT 1106	Applied Plant Science Lab	(2cr)
HORT 1108	Fundamentals of Floral Design	(4cr)
HORT 2112	Sustainable Greenhouse Production	(5cr)
	Electives	(1cr)

Total 16 Credits

Spring Semester

HORT 1110*	Advanced Floral Design	(4cr)
HORT 1118	Indoor Flowering & Foliage Plants	(4cr)
HORT 2125*	Special Occasion/Wedding Design	(4cr)
	Electives	(4cr)

Total 16 Credits

GRADUATION REQUIREMENT 32 CREDITS

*Denotes Prerequisites

GREEN & RETRO GREEN CONSTRUCTION



Green & Retro Green Construction

Certificate Curriculum

COMP 1101	Computer Fundamentals	(3cr)
MATH 1500	Applied Mathematics	(3cr)
RAST 1101	Industrial Electronics	(3cr)
RNET 1115	Intro to Green/ Retro Construction	(3cr)
RNET 1195	Internship	(2cr)
WELD 1100	Intro to Welding	(2cr)

Total 16 Credits

GRADUATION REQUIREMENT 16 CREDITS

Career Description

The certificate helps prepare graduates for entry-level positions in construction, green and retro construction in a variety of residential, commercial, as well as industrial environments. Many construction companies are looking for employees that have a basic knowledge and skills in Green and Retro Green construction. Residential and commercial customers have a growing interest in “green” technologies and building techniques.

Program Information

This certificate provides the knowledge and skills for entry-level positions involving green and retro construction applications in a variety of residential and industrial environments. This certificate may also meet the needs of an incumbent construction worker looking to upgrade their skills and knowledge through the courses offered.

Program Learning Outcomes

Graduates will be able to demonstrate basic proficiencies in green and retro construction, welding, industrial electronics and technical math. Graduates will be able to use and apply multiple green and retro construction technologies in entry level positions in construction.

HORTICULTURE



Career Description

An Associate of Applied Science (A.A.S.) in Horticulture is the gateway to a wide variety of careers in the huge and ever-growing horticulture industry. Depending on the emphasis chosen by the graduate, ornamental and edible plant production, greenhouse production, landscaping, floriculture and golf course maintenance are all occupations that are available to a graduate in this field.

Program Information

The A.A.S. in Horticulture covers a broad spectrum of the horticulture industry. Most students who receive their A.A.S. in Horticulture also select one (or two) of the diploma programs of interest to them. Students may select topics from landscaping, greenhouse production, and/or floral design to meet the technical elective requirement of this program.

Program Learning Outcomes

Graduate will be able to:

- Identify and practice safe use of tools, equipment and supplies used in horticulture careers
- Identify regional and Minnesota plants by common name, genus and species
- Propagate, grow, and maintain plants in horticultural production systems

- Identify and prescribe sustainable options in horticulture which benefit the environment while maintaining productivity and economic viability
- Design, construct and install plants for landscape projects
- Apply effective communication and interpersonal skills with co-workers, supervisors, suppliers and customers

Admissions

The Horticulture Program is offered as a full-time day program. Because of the sequencing of courses, it is best to begin this program Fall semester. However, many students begin in the spring and successfully complete the degree.

Transfer Opportunities

Articulation agreements are currently in place with the University of Minnesota. You may attend your first two years of college at Central Lakes College and transfer your credits to further your degree in Agricultural Education or Horticulture at the University of Minnesota Twin Cities or Crookston Campuses. Courses can also be transferred to many other four-year colleges such as North Dakota State University. It is important to check with advisors or counselors about transferability to these or other colleges before your first semester to take full advantage of current agreements.

Employment Opportunities

Employment opportunities can be found in greenhouse production, landscaping, floral design, and sales, as well as horticulture therapy, interior landscaping, and plant and flower brokering.

HORTICULTURE

Career Titles

Careers available are largely dependent on your goals. It is best to discuss your goals with a counselor for proper course selection. Some common career titles in this field include landscape designer, landscape salesperson, landscape installation foreman, propagator, plant consultant, greenhouse supply representative, pest control coordinator, landscape business owner/manager, and lawn maintenance business owner/manager. Other career areas include ornamental plant pest control, irrigation/sprinkler installation foreman, nursery/garden center sales, wholesale nursery sales, nursery supply sales, floral design, flower shop sales, wholesale flower sales, flower broker, interior plant rental, interior plant maintenance, and free-lance design.

Horticulture A.A.S. Curriculum

First Year - Fall Semester

HORT 1104	Plant Science	(4cr)
HORT 1106	Applied Plant Science Lab	(2cr)
HORT 2112	Sustainable Greenhouse Production	(5cr)

Student must choose one (1) of the following:

HORT 1108	Fundamentals of Floral Design	(4cr)
HORT 1110	Advanced Floral Design	(4cr)
HORT 2125	Special Occasion/ Wedding Design	(4cr)
	Electives	(2cr)

Total 17 Credits

Spring Semester

HORT 1196	Sustainable Greenhouse Crops	(4cr)
HORT 1180	Sustainable Landscaping	(3cr)
	General Education	(4cr)
	Electives	(5cr)

Total 16 Credits

Second Year - Fall Semester

HORT 1113	Annuals and Perennials	(4cr)
HORT 2140	Arboriculture	(4cr)
	General Education	(4cr)
	Electives	(3cr)

Total 15 Credits

Spring Semester

HORT 1118	Indoor Flowering & Foliage Plants	(4cr)
HORT 2116	Integrated Pest Management	(4cr)
	General Education	(8cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

LANDSCAPE TECHNOLOGY



Career Description

Landscape technology graduates find careers in a variety of positions related to landscape design, landscape construction, landscape installation, golf course maintenance, and nursery production. The demand for qualified individuals with good skills and work habits is very high. People who enjoy creating beautiful surroundings, working outside, and improving the environment will benefit from the Landscape Technology Program

Program Information

This two-year Landscape Technology Diploma Program provides students with a broad knowledge of the landscaping profession through real life situations in a practical, hands-on atmosphere. The courses are designed to provide knowledge for all phases of a landscape project. This knowledge includes in-depth information about the plants and products used in the landscaping industry, proper landscape design principles, up-to-date installation and construction practices, and procedures for estimating and bidding landscape projects.

Program Learning Outcomes

Graduate will be able to:

- Identify and practice safe use of tools, equipment and supplies used in horticulture careers
- Identify regional and Minnesota plants by common name, genus and species
- Propagate, grow, and maintain plants in horticultural production systems
- Identify and prescribe sustainable options in horticulture which benefit the environment while maintaining productivity and economic viability
- Design, construct and install landscape projects which include plants, patios, retaining walls and ponds
- Apply effective communication and interpersonal skills with co-workers, supervisors, suppliers and customers

Admissions

The Landscape Technology Program is offered as a full-time day program. Because of the sequencing of courses, it is best to begin this program Fall semester.

Transfer Opportunities

Many horticulture courses can be transferred to a variety of four-year colleges and universities. Because each college has its own requirements, always check with an advisor or counselor about transferability of specific courses to other colleges.

Career Titles

Some common career titles for people in this field are landscape designer, landscape salesperson, landscape installation foreman, landscape business owner/manager, lawn maintenance business owner/manager, ornamental plant pest control, irrigation/sprinkler installation, nursery/garden center sales, wholesale nursery sales and nursery supply sales.

Employment Opportunities

Job opportunities include landscape design, construction, and installation, garden center sales and positions in the greenhouse and nursery industry.

LANDSCAPE TECHNOLOGY

Landscape Technology Diploma Curriculum

First Year - Fall Semester

HORT 1104	Plant Science	(4cr)
HORT 1106	Applied Plant Science Lab	(2cr)
HORT 2165	Landscape Design	(4cr)
NATR 1120	Dendrology	(3cr)
HORT 2150	Retaining Wall Construction	(3cr)
OR		
HORT 2155	Deck, Patio, & Pond Construction	(4cr)

Total 16 Credits

Spring Semester

HORT 1103*	Ornamental Trees and Shrubs	(4cr)
HORT 1180	Sustainable Landscaping	(3cr)
HORT 1196	Sustainable Greenhouse Crops	(4cr)
HORT 2180*	Computer Assisted Landscape Design	(4cr)

Total 15 Credits

Second Year - Fall Semester

HORT 1113	Annuals and Perennials	(4cr)
HORT 2140	Arboriculture	(4cr)
	General Education	(4cr)
HORT 2150	Retaining Wall Construction	(3cr)
OR		
HORT 2155	Deck, Patio, & Pond Construction	(4cr)

Total 16 Credits

Spring Semester

HORT 1150	Turf Management	(3cr)
HORT 2116	Integrated Pest Management	(4cr)
HORT 2170*	Advanced Landscape Design	(4cr)
	General Education	(2cr)
	Elective	(2cr)

Total 15 Credits

GRADUATION REQUIREMENT 62 CREDITS

*Denotes Prerequisites

NATURAL RESOURCES



Career Description

People in the natural resource field often become involved with issues like biodiversity, environmental pollution, endangered species, and the future quality of human life. To prepare for this field, students will gain the skills needed for assessing, implementing and evaluating land and water practices as part of an integrated wildlife program. Graduates in natural resources use their knowledge and develop skills in forestry, fisheries, wildlife, and parks and recreation. They have learned the identification of organisms, methods for collecting data, and resource management principles.

Program Information

The Natural Resource Program prepares students for work in the natural resource field by providing a well-rounded background of course work and the opportunity to work with specialists in the field through internships. Credits can be transferred to a four-year college with which we have special transfer agreements, including the University of Minnesota at Crookston and the University of Wisconsin at Stevens Point.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate field identification of regionally important plants, mammals, birds and fish and their communities
- Use a broad range of technological tools to research, document, map, measure, record and analyze data relevant to natural resources
- Interpret how ecological relationships influence plants, mammals, birds and fish distribution, succession and biodiversity in ecosystems
- Analyze land characteristics and create land management plans
- Communicate in oral and written forms with supervisors, peers, area visitors and natural resource agencies
- Navigate and safely function in an outdoor workplace

Special Program Requirements

This is generally an outdoor program with some physical activity, such as walking, hiking, and working in forests and streams. Most of our equipment is light, but fire training certification to fight fires requires a 3 mile walk with a 45 pound pack in 45 minutes.

Accreditation

We are part of the Minnesota State Colleges and University System and accredited by the Higher Learning Commission.

Transfer Opportunities

Students have the opportunity to transfer to colleges like University of Wisconsin at Stevens Point, WI and the University of Minnesota at Crookston, MN with this degree.

Career Titles

This program will help students prepare for a wide range of careers, including the following: forester, forestry technician, wildlife manager, wildlife technician, fisheries manager, fisheries technician, parks manager, parks technician, naturalist, hydrologist, soils scientist, non-game wildlife personnel, natural resource conservation personnel, biologist, and plant taxonomist.

NATURAL RESOURCES

Employment Opportunities

Employment opportunities include seasonal and part-time work and internships while in school. The best opportunities for full-time work will require a bachelor's degree from a four-year university in one of the natural resource areas or from a more holistic natural resource management degree.

Natural Resources

A.A.S. Curriculum

First Year - Fall Semester

NATR 1112	Land Measurement	(3cr)
NATR 1120	Dendrology	(3cr)
NATR 1125	Ichthyology	(3cr)
NATR 1200	Introduction to Natural Resources	(3cr)
NATR 1280	Introduction to GPS & GIS (Arc View)	(2cr)
	General Education	(1cr)

Total 15 Credits

Spring Semester

NATR 1115	Plant Taxonomy	(2cr)
NATR 1130	Mammalogy	(3cr)
NATR 1135	Ornithology	(3cr)
NATR 1140	Limnology	(3cr)
NATR 2170	Advanced GPS & GIS	(2cr)
BIOL 2416	General Ecology	(4cr)

Total 17 Credits

Second Year - Fall Semester

NATR 2120*	Wetland Ecology	(3cr)
NATR 2130*	Wildlife Management	(3cr)
NATR 2155	Soil Science	(3cr)
	General Education	(7cr)

Total 16 Credits

Spring Semester

NATR 2110	Herpetology	(2cr)
NATR 2140*	Fisheries Management	(3cr)
NATR 2161*	Ecosystem Management	(2cr)
NATR 2201	Intro to Parks & Interpretation	(2cr)
NATR 2235*	Silviculture & Forest Management	(3cr)
	General Education	(4cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

Wildlife Tourism

Certificate Curriculum

Required Courses:

NATR 1130	Mammalogy	(3cr)
NATR 1135	Ornithology	(3cr)
NATR 1360	Animal Behavior	(3cr)
NATR 2110	Herpetology	(2cr)
NATR 2130	Wildlife Management	(3cr)
NATR 2201	Intro to Parks & Interpretation	(2cr)

Choose one (1) of the following:

SPCH 1410	Introduction to Communication Studies	(3cr)
SPCH 1421	Interpersonal Communications	(3cr)
SPCH 1431	Fundamentals of Public Speaking	(3cr)

Total 19 Credits

GRADUATION REQUIREMENT 19 CREDITS

RENEWABLE AND SUSTAINABLE ENERGY TECHNOLOGIES



Renewable and Sustainable Energy Technologies

Certificate Curriculum

COMP 1101	Computer Fundamentals.....	(3cr)
MATH 1500	Applied Mathematics	(3cr)
RAST 1101	Industrial Electronics	(3cr)
RNET 1100	Intro to Renewable and Sustainable Energy	(3cr)
RNET 1195	Internship	(2cr)
WELD 1100	Intro to Welding	(2cr)

Total 16 Credits

GRADUATION REQUIREMENT 16 CREDITS

Career Description

This certificate program prepares graduates for entry-level positions which involve the integration of renewable energy applications in a variety of business and industrial environments. Many industries are looking to their current and future employees to have “green” skills and knowledge in a variety of jobs such as construction, manufacturing or sales and many others---as long as the jobs have something to do with energy conservation or increasing the supply or renewable or clean energy sources.

Program Information

Graduates will gain skills and knowledge for entry level positions which involve the integration of renewable energy applications in a variety of business and industrial environments.

Program Learning Outcomes

Graduates will be able to demonstrate entry level proficiencies in renewable energies, welding, industrial electronics and technical math. Graduates will be able to use and apply multiple renewable energy technologies in entry level positions.

SUSTAINABLE GREENHOUSE PRODUCTION

Career Description

Sustainable greenhouse production graduates help produce a variety of ornamental plants such as bedding plants, holiday plants (Easter Lilies, Poinsettias, etc.), and plants for special occasions. The greenhouse facilities range from small, family run operations to large commercial production greenhouses. The greenhouse industry is quickly becoming a high-tech industry with computers, robotics, and other exciting innovations. People who appreciate natural beauty, enjoy caring for plants and flowers, and have an attention for detail are particularly well suited for this career.

Program Information

Students enrolled in the one-year Sustainable Greenhouse Production Program will learn how to schedule, produce, and care for a wide variety of plants grown commercially in the Upper Midwest as well as how to properly construct and manage a greenhouse production facility. A state-of-the-art greenhouse and laboratory provide the opportunity to learn in real-life situations.

Program Learning Outcomes

Graduate will be able to:

- Identify and practice safe use of tools, equipment and supplies used in horticulture careers
- Identify regional and Minnesota plants by common name, genus and species
- Propagate, grow, and maintain plants in horticultural production systems
- Identify and prescribe sustainable options in horticulture which benefit the environment while maintaining productivity and economic viability
- Design greenhouse production structures and systems
- Apply effective communication and interpersonal skills with co-workers, supervisors, suppliers and customers

Admissions

The Sustainable Greenhouse Production Program is offered as a full-time day program. Because of the sequencing of courses, it is best

to begin this program Fall semester.

Transfer Opportunities

Many horticulture courses can be transferred to a variety of four-year colleges and universities. Because each college has its own requirements, always check with an advisor or counselor about transferability of specific courses to these other colleges.

Career Titles

This program will help students prepare for a wide range of careers, including greenhouse owner/manager, greenhouse foreman, propagator, pest control, coordinator, plant sales, plant and supply buyer, greenhouse supply, representative, and plant consultant.

Employment Opportunities

Career opportunities include greenhouse production, plant propagation, greenhouse management and plant brokering.

Sustainable Greenhouse Production

Diploma Curriculum

Fall Semester

HORT 1104	Plant Science	(4cr)
HORT 1106	Applied Plant Science Lab	(2cr)
HORT 1113	Annuals and Perennials	(4cr)
HORT 2112	Sustainable Greenhouse Production	(5cr)
	Electives	(1cr)

Total 16 Credits

Spring Semester

HORT 1118	Indoor Flowering & Foliage Plants	(4cr)
HORT 1196	Sustainable Greenhouse Crops	(4cr)
HORT 2116	Integrated Pest Management	(4cr)
	Electives	(4cr)

Total 16 Credits

GRADUATION REQUIREMENT 32 CREDITS

*Denotes Prerequisites

CHILD DEVELOPMENT

Career Description

The Child Development Program prepares individuals to independently provide a healthy, safe, developmentally appropriate learning environment in support of families and children. The program meets current hiring standards of center-based childcare programs, Head Start, family childcare and paraprofessional job positions.

Program Information

Subjects covered in this program include child guidance, health, safety, nutrition, child development, parent relations, introduction to special education and professional leadership.

Program Learning Outcomes

Graduates will be able to:

- Integrate child development theory with appropriate practice in early care and education settings
- Plan and prepare effective instruction
- Demonstrate effective oral and written communications with families, coworkers, agencies, and early childhood partners
- Incorporate diverse teaching methods and strategies appropriate to addressing the needs of children and families
- Plan culturally relevant activities to nurture cognitive, physical, language, social and emotional development
- Demonstrate the skills of observation and record keeping of child development and learning
- Apply professional behavior in daily work with children, families, co-workers and the community
- Create and consistently maintain an appropriate, safe, healthy learning environment for children
- Recognize ethical, legal and professional responsibilities

Admissions

Child development courses are scheduled during the day with at least one additional course offered in the evening each semester. Some courses are offered online. This program is a member of E-LECT (e-learning for early childhood teachers), which offers an associate in applied science (A.A.S.) degree online. Talk with an advisor or admissions counselor for more details.

Transfer Opportunities

The Associate of Arts (A.A.) degree with a Child Development Certificate transfers to any MnSCU institution.

Career Titles

This program will help students prepare for a wide range of careers, including the following: school-age caregiver, early care and education assistant teacher, childcare giver, family childcare provider, Head Start teacher, nanny, and elementary school paraprofessional.

Selected Employers of Recent Graduates

Tri-County Head Start in Brainerd, Precious Years Childcare Center, Pillager Family Fun Stop, Step-in-Go Childcare in Crosby and Emily Charter School

Selected Job Titles of Recent Graduates

Assistant teacher in childcare centers, family childcare provider, Head Start teacher, elementary school paraprofessional, school-age care provider, school district, private preschool teacher

Employment Opportunities

Graduates of this program are prepared to work at childcare centers, Head Start programs, school districts, preschools, family childcare and after school programs.

CHILD DEVELOPMENT**Child Development
Care & Guidance****A.A.S. Curriculum****First Year - Fall Semester**

CDEV 1100	Foundations of Child Development	(3cr)
CDEV 1105	Child Safety, Health & Nutrition	(4cr)

OR all four (4) of these courses:

CDEV 1305	Child Abuse & Neglect (1cr)
CDEV 1306	Child Safety (1cr)
CDEV 1307	Child Health (1cr)
CDEV 1308	Child Nutrition (1cr)

CDEV 1110	Guidance: Managing Physical/Social Environ.	(4cr)
CDEV 1150	Childcare Business Strategies	(3cr)

OR

CDEV 2342	School Age Development	(4cr)
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Total 14-15 Credits**Spring Semester**

CDEV 1115	Planning & Implementing Curriculum	(3cr)
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OR

CDEV 2340	Professional Leadership	(3cr)
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CDEV 1130	Infant/Toddler Development & Learning	(4cr)
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CDEV 1133	Creative Developmental Experiences	(3cr)
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CDEV 1135	Profiles of Exceptional Child	(3cr)
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CDEV 1160	Internship	(4cr)
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Total 17 Credits**Second Year - Fall Semester**

CDEV 1120	Professional Relations Early Childhood Careers.	(3cr)
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CDEV 2343	School Age Development & Learning Exp.	(4cr)
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OR

CDEV 1150	Childcare Business Strategies	(3cr)
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CDEV 2350	Practicum I	(3cr)
	General Education.	(4cr)

Total 13-14 Credits**Spring Semester**

CDEV 2340	Professional Leadership	(3cr)
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OR

CDEV 1115	Planning & Implementing Curriculum	(3cr)
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	Elective	(1cr)
	General Education.	(11cr)

Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS

**Child Development
Certificate Curriculum****Fall Semester**

CDEV 1100	Foundations of Child Development	(3cr)
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CDEV 1105	Child Safety, Health & Nutrition	(4cr)
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CDEV 1110	Guidance: Managing Physical/Social Environ.	(4cr)
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Total 11 Credits**Spring Semester**

CDEV 1115	Planning and Implementing Curriculum	(3cr)
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OR

CDEV 2340	Professional Leadership	(3cr)
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CDEV 1160	Internship	(3cr)
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CDEV 1135	Profiles of the Exceptional Child.	(3cr)
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Total 9 Credits

GRADUATION REQUIREMENT 20 CREDITS

**Child Development Assistant
Diploma Curriculum****Fall Semester**

CDEV 1100	Foundations of Child Development	(3cr)
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CDEV 1105	Child Safety, Health & Nutrition	(4cr)
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OR all four (4) of these courses:

CDEV 1305	Child Abuse & Neglect	(1cr)
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CDEV 1306	Child Safety	(1cr)
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CDEV 1307	Child Health	(1cr)
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CDEV 1308	Child Nutrition	(1cr)
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CDEV 1110	Guidance: Managing Physical/Social Environ.	(4cr)
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CDEV 1120	Professional Relations Early Childhood Careers.	(3cr)
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Total 14 Credits**Spring Semester**

CDEV 1115	Planning & Implementing Curriculum	(3cr)
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OR

CDEV 2340	Professional Leadership	(3cr)
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CDEV 1130	Infant/Toddler Development & Learning	(4cr)
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CDEV 1133	Creative Developmental Experiences	(3cr)
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CDEV 1135	Profiles of Exceptional Child	(3cr)
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CDEV 1160	Internship	(4cr)
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Total 17 Credits

GRADUATION REQUIREMENT 31 CREDITS

CHILD DEVELOPMENT**Child Development
Young Child Education****A.S. Curriculum****First Year - Fall Semester**

CDEV 1100 Foundations of Child Development (3cr)
 CDEV 1110 Guidance: Managing Physical/Social Environ.
 (4cr)
 CDEV 1120 Professional Relations Early Childhood
 Careers (3cr)
 General Education (6cr)
 Total 16 Credits

Spring Semester

CDEV 1130 Infant/Toddler
 Development & Learning (4cr)
 CDEV 1135 Profiles of Exceptional Child (3cr)
 CDEV 1160 Internship (4cr)
 General Education (3cr)

Total 14 Credits**Second Year - Fall Semester**

General Education (15cr)

Total 15 Credits**Spring Semester**

CDEV 2100 Intro to Foundations of
 Public School Ed. (3cr)
 CDEV 2102 Foundations of Early Education . . . (3cr)
 CDEV 2120 Understanding &
 Supportive Parenting (3cr)
 General Education (6cr)

Total 15 Credits

GRADUATION REQUIREMENT 60 CREDITS**Child Development-American
Sign Language****A.A.S. Curriculum****First Year - Fall Semester**

AMSL 1410 American Sign Language (4cr)
 CDEV 1100 Foundations of
 Child Development (3cr)
 CDEV 1105 Child Safety, Health & Nutrition . . . (4cr)
 CDEV 1110 Guidance: Managing
 Physical/Social Environ. (4cr)

Total 15 Credits**Spring Semester**

AMSL 1412* American Sign Language (4cr)
 CDEV 1115 Planning & Implementing
 Curriculum (3cr)

OR

CDEV 2340 Professional Leadership (3cr)

CDEV 1130 Infant/Toddler Development
 and Learning (4cr)
 CDEV 1135 Profiles of Exceptional Child (3cr)

Total 14 Credits**Second Year - Fall Semester**

AMSL 2410* American Sign Language (4cr)
 AMSL 2420 Deaf Culture (3cr)
 CDEV 1120 Professional Relations
 Early Childhood Careers (3cr)
 CDEV 1160 Internship (4cr)

Total 14 Credits**Spring Semester**

AMSL 2412* American Sign Language (4cr)
 CDEV 1115 Planning & Implementing
 Curriculum (3cr)

OR

CDEV 2340 Professional Leadership (3cr)

CDEV 1133 Creative Developmental
 Experiences (3cr)

CDEV 2350 Practicum I (3cr)
 SPCH 2421 Intercultural Communication (3cr)
 General Education (1cr)

Total 17 Credits

GRADUATION REQUIREMENT 60 CREDITS

DENTAL ASSISTING



Career Description

Given the increasing demands for dental care, dental practices are designed for a dental team approved for the delivery of dental care. An exciting and challenging career awaits you as a professional dental assistant. A career in dental assisting offers variety, job satisfaction, opportunity for service, and financial reward.

Program Information

The Dental Assisting Program is designed to educate students on ways to control and prevent dental disease as well as teach patients preventive dental care. Training is provided in chairside skills and MN State expanded functions. There are three semesters. Fall and Spring are on-campus and the nine-week Summer session provides internships off-campus in dental facilities and private dental practices. This education prepares the student to take national and state written examinations required for certification as a licensed dental assistant. A certified licensed dental assistant becomes a member of the dental team.

Special Program Requirements

**American Heart Association – Health Care Provider CPR is a prerequisite for admission into the Dental Assisting Program. Students are encouraged to complete Human Biology

I prior to entering the program to reduce the amount of credit load Fall semester. A current healthcare provider CPR is required for Fall, Spring and Summer semesters.

Program Learning Outcomes

Graduates will be able to:

- Perform chair side procedures in a clinical setting
- Apply infection control, biohazards and treatment area practices
- Perform dental office procedures
- Perform radiographic and radiation safety procedures
- Communicate professionally with patients, peers and members of the dental health team
- Model professionalism through continuing education and membership in the American Dental Assistants Association

Accreditation

Accredited by the American Dental Association since May 1967.

Admissions

Progression through the program is sequential. Admission date is Fall semester. Applicants must have a high school diploma or GED. The curriculum in the Dental Assisting Program may expose students to hazardous materials, radiation and/or infectious diseases. Students will be provided with information through education and program policies to protect themselves and their patients from harm. Students will be expected to utilize appropriate safety precautions in the classroom, laboratory and clinic. Program policies are available upon request.

Transfer Opportunities

Some courses within the program may be used as elective credits toward an A.A. degree.

Career Titles

This program will help students prepare for a wide range of dental assisting careers, including chairside dental assistant in general/specialty practices, expanded-functions dental assistant, administrative business assistant,

DENTAL ASSISTING

dental sales personnel, sterilization assistant and dental insurance personnel.

Employment Opportunities

The career outlook for certified and registered dental assistants in Minnesota continues to grow due to the increased demand for dental care. The majority of graduates are employed as clinical assistants and Minnesota requires specialized credentials as an employment criteria. There is a great deal of stability and employment security for the individual who becomes a dental assistant.

**Dental Assisting
Diploma Curriculum****Fall Semester**

BIOL 1404	Human Biology I ***	(3cr)
DENT 1106	Dental Orientation & Anatomy	(2cr)
DENT 1116*	Dental Clinic I	(8cr)
DENT 1118*	Dental Radiology I	(2cr)
DENT 1120*	Preventive Dentistry	(2cr)
DENT 1124	Biomaterials	(2cr)

Total 19 Credits

Spring Semester

DENT 1114	Pathology, Pharm., Law & Emergencies	(3cr)
DENT 1123*	Dental Clinic II	(9cr)
DENT 1129*	Dental Radiology II	(2cr)
DENT 1132	Dental Specialties	(2cr)
DENT 1133*	Principles of Practice Mgmt. & Comm.	(2cr)

Total 18 Credits

Summer Session

DENT 1150*	Dental Internship (336 hours)	(7cr)
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Total 7 Credits

GRADUATION REQUIREMENT 44 CREDITS

**Dental Assisting
A.A.S. Curriculum****Prerequisite**

BIOL 1404	Human Biology (grade of a C- or higher)	(3cr)
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Fall Semester

DENT 1106	Dental Orientation & Anatomy	(2cr)
DENT 1116*	Dental Clinic I	(8cr)
DENT 1118*	Dental Radiology I	(2cr)
DENT 1120*	Preventive Dentistry	(2cr)
DENT 1124	Biomaterials	(2cr)

Total 16 Credits

Spring Semester

DENT 1114	Pathology, Pharm., Law & Emergencies	(3cr)
DENT 1123*	Dental Clinic II	(9cr)
DENT 1129*	Dental Radiology II	(2cr)
DENT 1132	Dental Specialties	(2cr)
DENT 1133*	Principles of Practice Mgmt. & Comm.	(2cr)

Total 18 Credits

Summer Session

DENT 1150*	Dental Internship (336 hours)	(7cr)
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Total 7 Credits

Second Year - Fall Semester

General Education	(16cr)
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Total 16 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

**American Heart Association-Health Care Provider CPR is a prerequisite before working on patients.

***Effective fall 2010, dental assisting applicants must have successfully completed, with a grade of "C-" or above, the Human Biology course prior to their formal acceptance to the Dental Assisting Program.

NOTE:

Assessment test courses must meet "Ability to Benefit" eligibility for acceptance into the program. Reading: 55, Arithmetic: 34

The curriculum in the dental assisting program may expose students to hazardous materials, radiation and/or infectious diseases.

Students will be provided with information through education and program policies to protect themselves and their patients from harm. Students will be expected to utilize appropriate safety precautions in the classroom, laboratory and clinic.

Program policies are available upon request.

MEDICAL ASSISTANT

Career Description

According to the Department of Employment and Economic Development, the need for health care support workers to meet both short-term and long-term workforce needs is high. In Minnesota, the employment for medical assistants is expected to grow much faster than average for all occupations through 2012. A medical assistant will have direct patient contact and work closely with physicians, nurses, and other health care professionals.

Medical assistants are multi-skilled individuals who are able to competently perform clinical and laboratory duties including collecting medical histories, taking and recording vital signs, explaining treatment procedures, preparing patients for examinations and x-rays, administering medications, removing sutures, changing dressings, sterilizing medical instruments, preparing examining room equipment and instruments, assisting the physician during examinations, preparing laboratory specimens, drawing blood, and performing basic laboratory tests. They may also perform duties that include answering phones, greeting patients, scheduling appointments, as well as other administrative duties.

Program Information

The 44-credit Medical Assistant Program is designed to prepare students for career opportunities in the rapidly growing, high-demand field of health care support. Instruction is focused to enable graduates to perform clinical, laboratory, and administrative tasks to keep the offices of physicians, podiatrists, chiropractors, and other health care practitioners running smoothly.

Upon successful completion of all coursework and a 270 hour clinical internship during the summer session, students will be prepared to sit for the national AAMA certification exam to become a certified medical assistant (CMA) AAMA, or sit for the national AMT certification exam to become a registered medical assistant (RMA)

The Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on the recommendation of the Medical Assisting Education Review Board (MAERB). In addition, the program is also accredited by the American Medical Technologists.

Program Learning Outcomes

Graduates will be able to:

- Interact with patients, families, physicians and healthcare teams in a respectful and caring manner
- Apply administrative business and office procedures and implement medical documentation systems
- Assist physicians and healthcare teams in clinical procedures related to examination and treatment
- Effectively use quality assurance requirements in performing clinical and laboratory procedures
- Perform common diagnostic procedures under a licensed healthcare provider ensuring patient comfort and safety
- Demonstrate professional behaviors and attitudes consistent with delivery of safe, ethical, legal and compassionate patient care

Admissions

Progression through the program is sequential. Admission start date is Fall semester. High school diploma or GED required. Healthcare Provider CPR is a prerequisite for this program. Students are encouraged to complete Medical Terminology (SECM 1360) during the Summer to reduce the credit load Fall semester. Please contact the Admissions Department on the Brainerd or Staples campus for information or to apply to the program.

Transfer Opportunities

Some courses within the program may be used as elective credits toward an associate degree.

MEDICAL ASSISTANT**Career Titles**

Students may take a national certification exam to become a Certified Medical Assistant or Registered Medical Assistant.

Employment Opportunities

Because the medical assistant is cross-trained in clinical, laboratory, and administrative duties, the occupation is in increasingly high demand as the population ages and the need for health care increases. Employment options are varied and can be found in clinics and hospitals, as well as other medical facilities.

Medical Assistant Diploma Curriculum**Fall Semester**

PNUR 1130	Life Span	(1 cr)
SECM 1360	Medical Terminology	(3 cr)
MEDA 1100	Body Structure/Function I	(3 cr)
MEDA 1110	Clinical Procedure I	(3 cr)
MEDA 1120	Laboratory Techniques I	(3 cr)
MEDA 1132	Phlebotomy	(2 cr)
MEDA 1135	Administrative Procedures I	(3 cr)

Total 18 Credits**Spring Semester**

PNUR 1134	Pharmacology	(2 cr)
MEDA 1105	Body Structure/Function II	(3 cr)
MEDA 1115	Clinical Procedures II	(3 cr)
MEDA 1125	Laboratory Techniques II	(3 cr)
MEDA 1130	Ethics and Issues	(1 cr)
MEDA 1137	Administrative Procedures II	(2 cr)
SECM 2316*	Fundamentals of Coding & Reimbursement	(3 cr)

Total 17 Credits**Summer Semester**

MEDA 1145	Fundamentals of Radiographic Imaging	(2 cr)
MEDA 2150	Medical Assistant Internship	(6 cr)
MEDA2155	Certification Exam Review	(1 cr)

Total 9 Credits**GRADUATION REQUIREMENT 44 CREDITS**

*Denotes Prerequisites

Medical Assistant**A.A.S. Curriculum****Prerequisites**

Health Care Provider or Professional Rescuer CPR

Required Technical Courses

MEDA 1100	Body Structure/Function I	(3 cr)
MEDA 1105*	Body Structure/Function II	(3 cr)
MEDA 1110*	Clinical Procedure I	(3 cr)
MEDA 1115*	Clinical Procedures II	(3 cr)
MEDA 1120	Laboratory Techniques I	(3 cr)
MEDA 1125*	Laboratory Techniques II	(3 cr)
MEDA 1130	Ethics and Issues	(1 cr)
MEDA 1132*	Phlebotomy	(2 cr)
MEDA 1135	Administrative Procedures I	(3 cr)
MEDA 1137*	Administrative Procedures II	(2 cr)
MEDA 1145*	Fundamentals of Radiographic Imaging	(3 cr)
MEDA 2150*	Medical Assistant Internship	(6 cr)
MEDA 2155*	Certification Exam Review	(1 cr)
PNUR 1130	Life Span	(1 cr)
PNUR 1134	Pharmacology	(2 cr)
SECM 1146	Fundamentals of Coding & Reimbursement	(3 cr)
SECM 1360	Medical Terminology	(3 cr)

Total 44 credits**Required General Education**

Students must complete the requirements listed in the A.A.S. Degree/General Education Transfer Curriculum document. Students must include within the General Education component the following courses:

ENGL 1422	Practical Writing	(3 cr)
OR		
ENGL 1410	Composition I	(4 cr)
AND		
SPCH 2421	Intercultural Communication	(3 cr)

Choose additional 5-6 credits from the Minnesota Transfer Curriculum. Instructor recommended courses:

AMSL 1410	American Sign Language	(4 cr)
OR		
SPAN 1401	Beginning Spanish	(4 cr)

Total 16 credits**GRADUATION REQUIREMENT 60 CREDITS**

*Denotes Prerequisites

NURSING



Career Description

Registered nurses (RNs) work to promote health, prevent disease, and help clients cope with illness. They are advocates and health educators for clients, families, and communities. When providing direct client care they observe, assess, and record symptoms, responses, and progress of clients; assist physicians during examinations, treatments, and surgeries; administer medications; and assist in convalescence and rehabilitation. RNs develop and manage nursing care plans and must possess critical thinking and problem solving skills.

Program Information

The Associates Degree (AD) Nursing Program at Central Lakes College is a practical nursing mobility program designed to educate and prepare qualified licensed practical nurses (LPNs) to take the National Council Licensure Examination for RNs. The program is one calendar year in length, beginning in June with graduation the following May.

Program Learning Outcomes

Graduate will be able to:

- Apply the knowledge and science of nursing by performing within the scope of practice as a registered nurse.
- Collaborate with the health care team,

including use of nursing judgment to accurately plan patient priorities and preferences, utilize available resources and referrals, and develop shared accountability and mutual respect for safe, ethical, patient-centered holistic nursing care.

- Demonstrate development of personal/professional behaviors by implementing one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, life-long learning, service learning/civic engagement, caring, advocacy, excellence, and safe quality care for diverse patients within a family and community context.
- Demonstrate comprehensive, holistic, assessments that include diversity in the dimensions of physical, developmental, emotional, psychosocial, cultural, spiritual and functional status of the client in context of environment.
- Analyze assessed information to determine effective clinical decision-making through a spirit of inquiry that results in problem resolution, individualizing care through use of the nursing process, and assuring the delivery of accurate, safe care that moves the client and support person toward positive outcomes.
- Effectively utilize therapeutic verbal and non-verbal communication techniques through culturally competent care directed toward promoting positive outcomes and establishing trusting client-centered relationships.

Special Program Requirements

- Completion of all science courses is required prior to formal acceptance into the AD Nursing Program.
- Completion of all other required liberal arts courses is highly recommended prior to application.
- A minimum grade of 'C' is required in each of the required courses (liberal arts, sciences and nursing) for the AD Nursing Program. A grade of 'C-minus' is not acceptable.

NURSING

- The applicant must have a minimum 2.75 cumulative GPA in required liberal arts and sciences courses and a minimum cumulative GPA of 2.75 in the practical nursing program.
- Students must apply each year that they are seeking acceptance to the AD Nursing Program.
- Admission continues to be highly competitive and in strong demand. Experience working as an LPN is highly beneficial to applicants.

Accreditation

This program is approved by the Minnesota Board of Nursing and the North Central Association of Colleges and Schools. The AD Nursing Program is seeking national accreditation from the National League for Nursing Accrediting Commission, Inc.; the program is a candidate for this accreditation with the expectation of obtaining national accreditation in 2013.

Information regarding NLN Accreditation may be found at their web site:
<http://nlnac.org/home.htm>

NLNAC is located at:
 National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326
 Phone: (414) 975-5020

Transfer Opportunities

Broader career opportunities are available for RNs with a bachelor's or master's degree in nursing. The counseling department has transfer guides for baccalaureate nursing programs at other colleges. Admission requirements and course equivalencies may vary.

Employment Opportunities

Employment opportunities for RNs are expected to grow through 2012. Thousands of job openings have resulted from the need to replace experienced RNs who leave the work force, especially as the median age of the RN population continues to rise.

Nursing A.S. Curriculum

Required Courses

	Student receives 8 credits for successfully completing a PN Program	(8cr)
NURS 2500*	Professional Concepts & Issues in Nursing	(2cr)
NURS 2501*	Adaptation to Health & Illness I . . .	(6cr)
NURS 2502*	Adaptation to Health & Illness II . . .	(6cr)
NURS 2513*	Nursing Practicum I	(3cr)
NURS 2514*	Nursing Practicum II	(3cr)
NURS 2520*	LPN to RN Role Transition	(1cr)
NURS 2522*	Dosage Calculations	(1cr)

Total 30 Credits

General Education

BIOL 2467*	Anatomy & Physiology I	(4cr)
BIOL 2468*	Anatomy & Physiology II	(4cr)
BIOL 2457*	Microbiology	(4cr)
CHEM 1405	Life Science Chemistry	(3cr)
CHEM 1406	Life Science Chemistry Lab	(1 cr)
ENGL 1411	Composition II	(4cr)
PHIL 2420	Ethics	(3cr)
PSYC 2421	General Psychology I	(4cr)
PSYC 2431*	Human Development	(3cr)

Total 30 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Notes: The student must earn a "C" or above in nursing courses and required liberal arts and science courses. A student earning a grade below a C cannot progress or graduate. Students will need to meet the required general education requirement of 30 credits.

Admission to the Nursing sequence is competitive and based on grades and performance in the PN program and general education courses.

NURSING ASSISTANT/HOME HEALTH AID



Career Description

A nursing assistant is a nursing home or certified boarding care home employee who is assigned by the director of nursing to provide or assist in the provision of nursing or nursing-related services under the supervision of a registered nurse.

Program Information

NSGA 1110, Nursing Assistant, is a 3 credit course designed to prepare students for employment in licensed nursing homes and certified boarding care homes. Skills are demonstrated in a supervised laboratory setting and the clinical environment. This course meets MN Stage and Federal requirements. Upon completion of the class, students are eligible to take the Nursing Assistant State Competency Evaluation which is necessary for placement on the MN Stage Registry.

NSGA 1110 Nursing Assistant, (or original certificate of completion of an Minnesota Department of Health approved 75 hour Nursing Assistant course), is a prerequisite to the Practical Nursing Program and to PNUR 1315, the Home Health Aide Class. PNUR 1315, Home Health Aide, is a one (1) credit course. Home Health Aides can be employed in nursing homes or home care agencies. An essential component of the Nursing Assistant course is

student participation in clinical experiences where they care for residents at a long term care health facilities.

Central Lakes College contracts with local health care facilities to provide these experiences. Any person who has direct contact with patients and residents at health care facilities licensed by the Minnesota Department of Health must have a criminal background check completed. Results of the study are to be on file in the department of nursing before students begin their clinical experiences.

Any student who does not pass the criminal background check will not be permitted to participate in clinical experiences, thereby rendering the individual ineligible to progress in the Nursing Assistant course. Students should direct questions and appeals to the Minnesota Department of Human Services, Licensing Division, 444 Lafayette Blvd., St. Paul, MN 55155-3842. Phone: (651) 296-3971. Web address: www.dhs.state.mn.us.

Employment Opportunities

Available employment options are varied and can be found in nursing homes, assisted living homes and home health care settings.

Career Titles

Nursing Assistant, NA
Nursing Assistant Registered, NAR
Home Health Aide, HHA

Available Courses

NSGA 1110	Nursing Assistant	3 credits
NSGA 1115	Home Health Aide.....	.1 credit

These courses are offered several times throughout the school year. Please contact your advisor or counselor for a current schedule.

Upon completion of the course, a Nursing Assistant Certificate and/or Home Health Aide Certificate is awarded. Students completing the Nursing Assistant Course are eligible to take the MN Nursing Assistant

NURSING ASSISTANT/HOME HEALTH AID

Competency Evaluation for placement on the MN State Registry. Students completing the Home Health Aide Course and the Nursing Assistant Course are eligible to take the MN Nursing Assistant/Home Health Competency Evaluation for placement on the MN State Registry.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate safe and respectful resident personal cares in a long term care facility setting
- Demonstrate professional work ethic by arriving for class and clinical on time
- Demonstrate effective verbal and non-verbal communication skills with residents and other health care team members in a respectful manner that preserves human dignity
- Demonstrate accurate measurement of intake, output, height, weight and vital signs

Admissions

Please contact the admissions department for information or to register for the class.

Special Program Requirement

The application process includes completion of a CLC application and the College Entrance Test (CET). A \$20 application fee is required.

Nursing Assistant/Home Health Aide Competency Evaluation

Central Lakes College offer competency evaluation for nursing assistant and home health aide candidates seeking placement on the MN State Registry. Testing dates, times and fees vary. Please contact the Business Office at Central Lakes College for a current schedule.

Nursing Assistant

Certificate Curriculum

NSGA 1110	Nursing Assistant	(3cr)
NSGA 1115	Home Health Aide.....	(1cr)
Total 4 credits		

These courses are offered several times throughout the school year. Please consult your adviser or counselor for a current schedule.

PRACTICAL NURSING

Career Description

Licensed practical nurses (LPNs) and licensed vocational nurses (LVNs) care for people who are sick, injured or disabled under the direction of physicians and registered nurses. The nature of the direction and supervision required varies by state and job setting.

Program Information

The Practical Nursing Program is designed to prepare graduates to take the National Council Licensure Examination for Practical Nursing. Student course requirements include a wide variety of clinical experiences in hospitals, clinics and nursing homes. Graduates join the healthcare team as LPNs upon successful completion of the licensing requirements. There are several program options available. Classes are offered at Brainerd and/or Staples campuses.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate professional identity and personal/professional development through accountability, adhering to standards of practical nursing practice within legal, ethical and regulatory framework with specified populations and identification of rationale for scope of practice decision making.
- Effectively communicate with patients and members of the interdisciplinary health care team, incorporating interpersonal and therapeutic verbal and non-verbal communication skills.
- Collect and analyze holistic patient-centered information from multiple sources to establish foundation for relationship-centered nursing care through nursing judgments within the practical nursing role.
- Collaborate with the registered nurse or other members of the health care team to organize and incorporate data collection and knowledge base to contribute to patient care and actions based on established nursing protocols and nursing process.
- Demonstrate nursing excellence in a caring and empathetic approach to the safe, therapeutic, and individualized care of each client and provide culturally competent care

across the lifespan to individuals within a diverse society and within the context of their environment.

- Implement competent patient-centered care with integrity at the direction of the registered nurse through performance of nursing interventions and with a spirit of inquiry at the Practical Nurse entry level.

Admissions

Please contact the admissions department for information or to apply to the program.

Special Program Requirements

This program has a special application process. This includes completion of a CLC application and the College Entrance Test (CET). Also, a practical nursing application must be completed along with the ACCUPLACER TEST. Please contact the admissions department for information or to apply to the program.

Accreditation

This program is approved by the Minnesota Board of Nursing and the North Central Association of Colleges and Schools. The Practical Nursing Program is seeking national accreditation from the National League for Nursing Accrediting Commission, Inc.; the program is a candidate for this accreditation with the expectation of obtaining national accreditation in 2013.

Information regarding NLN Accreditation may be found at their web site:
<http://nlnac.org/home.htm>.

NLNAC is located at:
National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326
Phone: (414) 975-5020

Employment Opportunities

Available employment options are varied and can be found in acute care hospitals, nursing homes, home health care settings and clinics.

PRACTICAL NURSING**Practical Nursing
Diploma Curriculum****Prerequisites**

Health Care Provider or Professional Rescuer	
BIOL 1404	Human Biology (3cr)
OR	
BIOL 2467*	Anatomy & Physiology I (4cr)
AND	
BIOL 2468*	Anatomy & Physiology II (4cr)

ENGL 1410	Composition 1 (4cr)
NSGA 1110	Nursing Assistant (3cr)
OR	

Original Certificate of Completion of the Minnesota Department of Health approved 75 hour Nursing Assistant Course

PNUR 1130	Life Span (1cr)
PNUR 1132	Infection Control (1cr)
PNUR 1138	Medical Terminology (1cr)

Pass TEAS entrance test
(Test of Essential Academic Skills)

Total 11 Credits**Fall Semester**

PNUR 1160*	Practical Nursing Skills Lab (3cr)
PNUR 1161*	Clinical Lab I (3cr)
PNUR 1168*	Psychosocial Nursing (3cr)
PNUR 1265*	Medical Surgical Nursing I (6cr)

Total 15 Credits**Spring Semester**

PNUR 1162*	Clinical Lab II (5cr)
PNUR 1166*	Gerontological Nursing (1cr)
PNUR 1175*	Maternal Child Health (2cr)
PNUR 1270*	Medical Surgical Nursing II (6cr)

Total 14 Credits**GRADUATION REQUIREMENT 44 CREDITS**

*Denotes Prerequisites

**Student may substitute PSYC 2431 Human Development (3cr) for PNUR 1130 Life Span (1cr)

**Student may substitute SECM 1360 Medical Terminology (3cr) 3 credits for PNUR 1138 Medical Terminology.

**Practical Nursing Diploma
Curriculum (One-Year Plan)****Prerequisites**

Health Care Provider or Professional Rescuer	
BIOL 1404	Human Biology (3cr)
OR	
BIOL 2467*	Anatomy & Physiology I (4cr)
AND	
BIOL 2468*	Anatomy & Physiology II (4cr)

ENGL 1410	Composition 1 (4cr)
NSGA 1110	Nursing Assistant (3cr)

Total 10 Credits**Fall Semester**

PNUR 1130	Life Span** (1cr)
PNUR 1132	Infection Control (1cr)
PNUR 1134	Pharmacology (2cr)
PNUR 1138	Medical Terminology** (1cr)
PNUR 1160*	Practical Nursing Skills Lab (3cr)
PNUR 1161*	Clinical Lab I (1cr)
PNUR 1168*	Psychosocial Nursing (3cr)
PNUR 1265*	Medical Surgical Nursing I (5cr)

Total 17 Credits**Spring Semester**

PNUR 1162*	Clinical Lab II (4cr)
PNUR 1166*	Gerontological Nursing (2cr)
PNUR 1175*	Maternal Child Health (3cr)
PNUR 1270*	Medical Surgical Nursing II (5cr)

Total 14 Credits**Summer Session**

PNUR 1163*	Clinical Lab III (3cr)
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Total 3 Credits**GRADUATION REQUIREMENT 44 CREDITS**

*Denotes Prerequisites

**Student may substitute PSYC 2431 Human Development (3cr) for PNUR Life Span (1 cr)

**Student may substitute SECM 1360 Medical Terminology (3cr) 3 credits for PNUR 1138 Medical Terminology.

PRACTICAL NURSING**Practical Nursing
Diploma Curriculum
(One-Year Plan -
January Start)****Prerequisites**

Health Care Provider or Professional Rescuer	
BIOL 1404	Human Biology (3cr)
OR	
BIOL 2467*	Anatomy & Physiology I (4cr)
AND	
BIOL 2468*	Anatomy & Physiology II (4cr)

ENGL 1410	Composition 1 (4cr)
NSGA 1110	Nursing Assistant (3cr)

Total 10 Credits**Spring Semester**

PNUR 1130	Life Span** (1cr)
PNUR 1132	Infection Control (1cr)
PNUR 1134	Pharmacology (2cr)
PNUR 1138	Medical Terminology** (1cr)
PNUR 1166*	Gerontological Nursing (2cr)
PNUR 1168*	Psychosocial Nursing (3cr)
PNUR 1160*	Practical Nursing Skills Lab (3cr)

Total 13 Credits**Summer Session**

PNUR 1161*	Clinical Lab I (1cr)
PNUR 1265*	Medical Surgical Nursing I (5cr)

Total 6 Credits**Fall Semester**

PNUR 1162*	Clinical Lab II (4cr)
PNUR 1175*	Maternal Child Health (3cr)
PNUR 1270*	Medical Surgical Nursing II (5cr)

Total 12 Credits**Spring Semester**

PNUR 1163*	Clinical Lab III (3cr)
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Total 3 Credits**GRADUATION REQUIREMENT 44 CREDITS**

*Denotes Prerequisites

**Student may substitute SECM 1360 Medical Terminology, 3 credits for PNUR 1138 Medical Terminology.

**Student may substitute PSYC 2431 Human Development (3cr) for PNUR 1130 Life Span (1 cr).

**Practical Nursing
Diploma Curriculum
(Two-Year Plan)****Prerequisites**

Health Care Provider or Professional Rescuer

BIOL 1404	Human Biology (3cr)
OR	
BIOL 2467*	Anatomy & Physiology I (4cr)
AND	
BIOL 2468*	Anatomy & Physiology II (4cr)
ENGL 1410	Composition 1 (4cr)
NSGA 1110	Nursing Assistant (3cr)

Total 10 Credits**First Year - Fall Semester**

PNUR 1130	Life Span** (1cr)
PNUR 1132	Infection Control (1cr)
PNUR 1134	Pharmacology (2cr)
PNUR 1138	Medical Terminology** (1cr)
PNUR 1166*	Gerontological Nursing (2cr)
PNUR 1168*	Psychosocial Nursing (3cr)

Total 10 Credits**Spring Semester**

PNUR 1160*	Practical Nursing Skills Lab (3cr)
PNUR 1161*	Clinical Lab I (1cr)
PNUR 1265*	Medical Surgical Nursing I (5cr)

Total 9 Credits**Second Year - Fall Semester**

PNUR 1162*	Clinical Lab II (4cr)
PNUR 1175*	Maternal Child Health (3cr)
PNUR 1270*	Medical Surgical Nursing II (5cr)

Total 12 Credits**Spring Semester**

PNUR 1163*	Clinical Lab III (3cr)
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Total 3 Credits**GRADUATION REQUIREMENT 44 CREDITS**

*Denotes Prerequisites

**Student may substitute SECM 1360 Medical Terminology, 3 credits for PNUR 1138 Medical Terminology.

**Student may substitute PSYC 2431 Human Development (3cr), for PNUR 1130 Life Span (1 cr).

NOTES: The student must earn a "C" or above in nursing courses and required liberal arts and science courses.

A student earning a grade below a C cannot progress or graduate.

SPECIAL EDUCATION

Career Description

Graduates will be qualified to seek immediate employment as paraprofessionals in public or private schools and will be particularly qualified to work with students with special needs, which is the largest segment of paraprofessional needs.

Program Information

The Special Education A.A.S. degree is designed to meet the needs of individuals seeking employment as a special education paraprofessional. The program is also beneficial to anyone working in family or center-based childcare, as a nanny, or preschool teacher. Through an articulation agreement with the College of Education at St. Cloud State University, students can transfer the credits directly into a Bachelor Degree program in special education.

Program Learning Outcomes

Graduates will be able to:

- Integrate child development theory with appropriate practice in early care and education settings.
- Plan and prepare effective instruction.
- Demonstrate effective oral and written communications with families, coworkers, agencies, and early childhood partners.
- Plan culturally relevant activities to nurture cognitive, physical, language, social and emotional development.
- Recognize ethical, legal, and professional responsibilities.
- Summarize and demonstrate understanding of special education laws and regulations, the needs of special education students and the special education working environment.

Special Program Requirements/ Admissions:

A MN DHS background check must be obtained before the student is admitted to the degree program.

Accreditation

The CLC Child Development program is currently involved in the National Association for the Education of Young Children accreditation process.

Transfer Opportunities

Students can transfer the entire A.A.S. degree directly into the Bachelors Degree program in Special Education at St. Cloud State University.

Employment Opportunities

DEED shows occupational growth projections of 12% in Central MN, and 18%, nationwide, in addition to the significant needs for replacement of retiring Special Education teachers. OSDS information projects 753 annual openings in MN with 686 of these coming from replacement needs. That same source also projects just 65 graduates per year for this period.

Career Titles

Special Education paraprofessional

SPECIAL EDUCATION**Special Education****A.A.S. Curriculum****First Year - Fall Semester**

CDEV 1100 Foundations of
Child Development (3 cr)

OR

**CEEP 361 Intro to Educational Psychology
(must enroll in this course
through SCSU)

PSYC 2421 General Psychology (4cr)
General Education. (8cr)

Total 15 Credits

Spring Semester

CDEV 1135 Profiles of Exceptional Child (3cr)

CDEV 2100 Intro to Found of
Public School Ed (3cr)

CDEV 2112 Collaboration Skills & Trans Trng . . (3cr)
General Education. (5cr)

Total 14 Credits

Second Year - Fall Semester

CDEV 2110 Char. of Learning &
Behavioral Dis. (3cr)

CDEV 2114 Intro to Autism
Spectrum Disorder (2cr)
General Education. (10 cr)

Total 15 Credits

Spring Semester

HLTH 1507 Drug Awareness (3cr)

PSYC 2431* Human Development (3cr)
General Education. (10cr)

Total 16 Credits

GRADUATION REQUIREMENT 60 CREDITS

* Denotes Prerequisites

CRIMINAL JUSTICE

Career Description

A criminal justice degree is part of the Professional Peace Officer Education Program requirement for Minnesota Peace Officer licensing standards. All course work is certified by the Minnesota Board of Peace Officer Standards and Training and meets the Board's learning objectives. The degree applies for those interested in other areas of the justice system.

Program Information

Mandated training and education leading to state licensure as a peace officer.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate knowledge of structure, process and relationships between law enforcement, the courts and correctional systems
- Apply tactical skills, weapon safety, defense and arrest tactics, vehicle operation, crisis management and force options
- Process crime scenes from preliminary stage through disposition
- Function in a multicultural society as a mature, adaptable citizen, while meeting the needs and challenges of clients and communities
- Interpret and apply theory, law, policy and practice as it relates to juvenile delinquency and deviant behavior
- Demonstrate an understanding of the roles of the legislative, judicial and executive branches and how they relate to criminal law
- Apply knowledge of criminal law, constitutional law and Minnesota traffic code
- Demonstrate strong and effective written and oral communication skills
- Understand the importance of ethics and ethical behavior in law enforcement

Admissions

Any student who is seeking a degree in Criminal Justice A.A.S., Natural Resources Law Enforcement, Certificate, or Criminalistics degree must complete and pass a background check prior to being accepted into the previously mentioned programs. This background

check should be completed by the student prior to the first day of courses. Information about this background check can be found at <https://www.certifiedbackground.com>.

Open with the above special requirements noted.

Transfer Opportunities

Articulation with the private university consortium in St Paul, MN and Bemidji State University. Other MnSCU colleges and universities conduct a student-by-student evaluation regarding transfer of courses and degree.

Career Titles

Police Officer, Deputy Sheriff, Corrections Officer, Parole Officer, Probation Officer.

Criminalistics

The Associate in Science degree in Criminalistics will prepare students to work in a municipal or county crime lab. Generally, state labs require bachelor's degree in chemistry or biology. With this in mind, the criminalistics degree prepares students for a science degree at a four-year institution. The coursework is also valuable for law enforcement officers already licensed and conducting investigations for their departments. All students pursuing Minnesota Peace Officer Licensure will be required to complete a BCA background investigation.

Employment Opportunities

70% of our graduates are employed in the field within nine months of passing the licensing examination.

Criminal Justice A.A.S. Curriculum

Required Courses

CRJU 1101	Criminal Justice	(3cr)
CRJU 1104	Juvenile Justice	(3cr)
CRJU 2101**	Criminal Law	(3cr)
CRJU 2102*	Criminal Procedures	(4cr)
CRJU 2108	Criminal Investigations	(3cr)
CRJU 2114**	Traffic Law	(3cr)
CRJU 2124	Evidence Identification & Prep	(4cr)
CRJU 2140	Law Enforcement & Behavioral Science	(3cr)

Total 26 credits

CRIMINAL JUSTICE

Students must choose a minimum of 27 credits from the following list:

PSYC 2421	General Psychology	(4cr)
CRJU 1106	Corrections & Probation.	(3cr)
CRJU 1108	Community Corrections	(3cr)
CRJU 1109	Report Writing.	(3cr)
CRJU 2110	Topics in Criminal Justice.	(3cr)
CRJU 2112	Ballistic & Firearms Identification.	(4cr)
CRJU 2116	Science of Fingerprints	(4cr)
CRJU 2118	Criminal Justice Photography.	(4cr)
CRJU 2135	Internship	(4-8cr)
CRJU 2150	Constitutional Law & Justice System.	(3cr)
CRJU 2311	Basic Firearms	(1cr)
CRJU 2399	Seminar in Police Administration.	(1-3cr)
EMTS 1504	Emergency Medical Technician.	(7cr)
EMTS 1505	First Responder.	(3cr)
PHED 1525	Personal Protection Awareness	(2cr)
SPAN 1401	Beginning Spanish I	(4cr)
SPAN 1402	Beginning Spanish II.	(4cr)
	Criminal Justice Skills Courses	(12cr):
CRJU 2160	Use of Force.	(2cr)
CRJU 2162	Firearms	(3cr)
CRJU 2164	Patrol Practical's	(5cr)
CRJU 2166	Tactical Communications/ Relations.	(2cr)

Note: Students may transfer up to fourteen (14) credits of criminal justice coursework in the above area from an accredited college.

Total 27 credits**General Education**

ENGL 1410	Composition I	(4cr)
SOCL 2405	Criminology	(3cr)
SOCL 2481	Race Ethnicity & Oppression.	(3cr)
Choose one of the following:		
SPCH 1410	Introduction to Communication Studies.	(3cr)
SPCH 1431	Fundamentals of Public Speaking	(3cr)
SPCH 1421	Interpersonal Communication	(3cr)
Students must complete six (6) credits from Goals 1-10 of the MnTC		

Total 19 credits**GRADUATION REQUIREMENT 72 CREDITS**

*Denotes Prerequisite of CRJU 1101

**These courses must be completed prior to or within the first semester of SKILLS

Note: Students must have an approved forty (40) hour First Responder or higher certification prior to POST exam.

Note: SKILLS must be completed to become a licensed peace officer in MN and is generally completed during final year.

Criminalistics A.S. Curriculum**Required Courses**

CRJU 1101*	Criminal Justice	(3cr)
CRJU 2108*	Criminal Investigations.	(3cr)
CRJU 2112*	Ballistic & Firearms Identification.	(4cr)
CRJU 2116*	Science of Fingerprints	(4cr)
CRJU 2118*	Criminal Justice Photography.	(4cr)
CRJU 2124*	Evidence Identification & Prep	(4cr)
CRJU 2135*	Internship	(2cr)
CRJU 2311	Basic Firearms	(1cr)

Total 25 Credits**General Education**

CHEM 1424	Chemical Principles I.	(5cr)
CHEM 1425	Chemical Principles II	(5cr)
CHEM 2472	Organic Chemistry I	(5cr)
ENGL 1410	Composition I.	(4cr)
PHYS 1401	College Physics I.	(4cr)
SPCH 2421	Intercultural Communications.	(3cr)

9 additional credits are required from goal areas 4-10 of the MN Liberal Arts Transfer Curriculum. These credits must be taken in 4 different goal areas.

PHIL 1421	Critical Thinking.	(3cr) [Goal 2 & 9]
SOCL 2481	Race, Ethnicity & Oppression	(3cr) [Goal 5 & 7]
CHEM 1410	Environmental Chemistry	(3cr) [Goal 3 & 10]

Total 35 Credits**GRADUATION REQUIREMENT 60 CREDITS**

*These courses are required for Minnesota P.O.S.T. licensing.

Criminal Justice Certificate Curriculum**Required Courses**

CRJU 1101*	Criminal Justice	(3cr)
CRJU 1104*	Juvenile Justice.	(3cr)
CRJU 2101*	Criminal Law	(3cr)
CRJU 2102*	Criminal Procedures	(4cr)
CRJU 2108*	Criminal Investigations.	(3cr)
CRJU 2114**	Traffic Law	(3cr)
CRJU 2124*	Evidence Identification & Prep	(4cr)
CRJU 2140*	Law Enforcement & Behavioral Science	(3cr)

Total 26 credits**GRADUATION REQUIREMENT 26 CREDITS**

*The certificate program is available to students who have completed degree requirements (either two-year, four-year or graduate) from an accredited college or university and are seeking a professional peace officer's license. The eight licensing courses can be completed in one academic year and will allow students to enter skills and then take the state-licensing exam.

*Students must have an approved forty-hour emergency first aid certificate before attending skills courses.

**These courses required for Minnesota P.O.S.T. licensing must be completed within three (3) years.

NATURAL RESOURCES LAW ENFORCEMENT

Career Description

Students in the Natural Resources Law Enforcement Program learn skills that lead to becoming a conservation officer. Conservation officers work with fish and wildlife agencies, state parks, trails, forests, waters and wetlands, as well as work in educational activities within and throughout Minnesota. Conservation officers often work from 4x4 patrol vehicles, snowmobiles, ATV, and various watercrafts.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate field identification of regionally important mammals, birds and fish and their communities
- Use a broad range of technological tools to research, document, map, measure, record and analyze data relevant to natural resources
- Navigate and safely function in an outdoor workplace
- Demonstrate knowledge of structure, process and relationships between law enforcement, the courts and correctional systems
- Apply tactical skills, weapon safety, defense and arrest tactics, vehicle operation, crisis management and force options
- Process crime scenes from preliminary stage through disposition
- Function in a multicultural society as a mature, adaptable citizen, while meeting the needs and challenges of clients and communities
- Interpret and apply theory, law, policy and practice as it relates to juvenile delinquency and deviant behavior
- Demonstrate an understanding of the roles of the legislative, judicial and executive branches and how they relate to criminal law
- Apply knowledge of criminal law, constitutional law and Minnesota traffic code
- Demonstrate strong and effective written and oral communication skills
- Understand the importance of ethics and ethical behavior in law enforcement

Admissions

Any student who is seeking a degree in Criminal Justice A.A.S., Natural Resources Law Enforcement, Certificate, or Criminalistics degree must complete and pass a background check prior to being accepted into the previously mentioned programs. This background check should be completed by the student prior to the first day of courses. Information about this background check can be found at Certified Background.

Open with the above special requirements noted.

Special Program Requirements

Students must be able to complete skills portion of the program to become licensed. This involves several real-life crime-scene situations, firearms and physical proficiency, and law enforcement procedural practices.

Transfer Opportunities

Students have the opportunity to transfer to most four-year colleges that offer a Bachelor of Arts in Law Enforcement.

Employment Opportunities

The selection process for being a conservation officer in Minnesota includes a written exam, division interview, background investigation, functional capacity exam, psychological assessment and a medical evaluation. In addition, conservation officers must be a United States Citizen, possess a valid Minnesota driver's license, have no felony convictions, have the ability to swim and possess a license or be eligible for licensing as a Minnesota peace officer at the time of hire.

NATURAL RESOURCES LAW ENFORCEMENT**Natural Resources
Law Enforcement****A.A.S. Curriculum****Required Courses**

CRJU 1101*	Criminal Justice	(3cr)
CRJU 1104*	Juvenile Justice	(3cr)
CRJU 2101*	Criminal Law	(3cr)
CRJU 2102*	Criminal Procedures	(4cr)
CRJU 2108*	Criminal Investigations.	(3cr)
CRJU 2140*	Law Enforcement & Behavioral Science	(3cr)
NATR 1106	Intro to NR Law Enforcement	(2cr)
NATR 1125	Ichthyology	(3cr)
NATR 1130	Mammalogy	(3cr)
NATR 1135	Ornithology	(3cr)
NATR 1360	Animal Behavior	(3cr)
NATR 2110	Herpetology	(2cr)

Required Total 35 credits**General Education Courses**

Student must complete the requirements listed in the A.A.S. Degree/General Education Transfer Curriculum document.

BIOL 2416	General Ecology	(3cr)
ENGL 1410	Composition I	(4cr)
POLS 1439	State & Local Government.	(3cr)
OR		
POLS 1435	American Government Politics	(3cr)
SOCL 2405	Criminology	(3cr)
SOCL 2481	Race Ethnicity & Oppression.	(3cr)

Choose one (1) of the following:

SPCH 1431	Fundamentals of Public Speaking . (3cr)
SPCH 1421	Interpersonal Communication. . . . (3cr)

General Education Total 19 credits**Electives**

Choose a minimum of eighteen (18) credits from following to complete program:

CRJU 2114	Traffic Law	(3cr)
CRJU 2124	Evidence Identification & Prep (4cr)	
NATR 1112	Land Measurement	(3cr)
NATR 1120	Dendrology	(3cr)
NATR 1140	Limnology	(3cr)
NATR 1200	Intro to Natural Resources	(3cr)
NATR 1280	Intro to GPS & GIS (Arc View) (2cr)	
NATR 2130*	Wildlife Management	(3cr)
NATR 2140*	Fisheries Management	(3cr)
	Skills (offered at CLC-check w/coordinator).	(10-14cr)

Total 18 credits**GRADUATION REQUIREMENT 72 CREDITS**

*Denotes Prerequisites

Individual semester plans are determined between instructor and student to best meet the student's needs.

APPLIED ENGINEERING TECHNOLOGY

Career Description

Engineering technicians use the principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, inspection, and maintenance. Engineering Technicians combine knowledge of mechanical engineering technology with knowledge of electrical and electronic circuits to design, develop, test, and manufacture electronic and computer-controlled mechanical systems, such as robotic assembly machines.

Program Information

The two-year program provides an application-oriented, electronic/manufacturing background, extensive hands-on laboratory experience, and the use of standard and specialized test equipment. This unique degree program is designed to convey relevant knowledge and industry skills needed to be job-ready in the high-tech workplace.

Program Learning Outcomes

Graduates will be able to:

- Identify and apply appropriate safety procedures
- Apply knowledge and skills in electrical systems
- Apply knowledge and skills in mechanical systems
- Apply knowledge and skills in creating program code
- Analyze and apply specific manufacturing process procedures
- Utilize statistical process control software and analyze results
- Calculate Return of Investment (ROI) of automated equipment

Transfer Opportunities

Bemidji State University

Employment Opportunities

Engineering technician openings abound across the country. According to the Minnesota Department of Employment and Economic Development, the need for engineering, industrial engineering and mechanical engineering technicians to meet the long-term workforce needs is relatively high.

Career Titles

Process engineering technician, engineering support specialist, process controls engineer, manufacturing engineering technician.

Applied Engineering

A.A.S. Curriculum

First Year - Fall Semester

RAST 1120	Intro to Engineering Graphics	(2cr)
OR		
MTRD 1120	Intro to Engineering Graphics	(2cr)
RAST 1104	Introduction to Robotics	(2cr)
RAST 1109	Computers in Industry	(2cr)
RAST 1101	Industrial Electronics I	(3cr)
RAST 1111	Industrial Electronics Lab I	(2cr)
RAST 1110	Intro to Manufacturing	(2cr)
	General Education	(3cr)

Total 16 Credits

Spring Semester

MATH 1470	College Algebra	(3cr)
RAST 1102	Industrial Electronics II	(3cr)
RAST 1212	Industrial Electronics Lab II	(2cr)
RAST 1103*	Motors & Drives	(3cr)
RAST 1113*	Motors & Drives Lab	(3cr)
RAST 1206*	Programmable Logic Controllers I	(3cr)

Total 17 Credits

Second Year - Fall Semester

ENGR 1500	Introduction to Engineering	(2cr)
MTRD 1265	CNC Programming & Process Planning	(2cr)
RAST 2105*	Transducers	(2cr)
RAST 2165*	Fluid Power	(2cr)
RAST 2355*	Programmable Logic Controllers II	(2cr)
PHYS 1401*	College Physics I	(4cr)

Total 14 Credits

Spring Semester

COMP 2222	Intro to Visual Basics & Scripting	(3cr)
WELD 1100	Intro to Welding	(2cr)
	General Education	(8cr)

Total 13 Credits

GRADUATION REQUIREMENT 60 CREDITS

ENGINEERING

Career Description

Engineering appeals to students that enjoy the challenge of learning how things work and enjoy using this knowledge to improve the world in which they live. They are creative thinkers that enjoy design activities. They like hands-on activities and building things. Because of the bewildering variety of engineering fields, a survey course, titled Introduction to Engineering, is recommended to acquaint students with opportunities in this diverse field of study.

Program Information

The survey course in engineering is the only course with no prerequisites. The remaining engineering courses are sophomore level courses requiring completion of two semesters of Calculus (MATH 1477-1478) and Engineering Physics (ENGR 1411).

Transfer Opportunities

Central Lakes College offers an Engineering Associates of Science (A.S.) Degree that is designed to lead to a bachelor's degree in engineering at a four-year university. These credits transfer in full through articulation agreements with all area engineering schools. CLC students most often transfer to the University of Minnesota (Minneapolis or Duluth), North Dakota State University (NDSU), the University of North Dakota (UND), Mankato State University (MSU), and St. Cloud State University (SCSU).

Employment Opportunities

Engineering degrees are among the most highly paid of bachelor's degrees and span a very large number of fields. The most common engineering fields include civil engineering, mechanical engineering, electrical engineering, and chemical engineering. Other fields include, but are not limited to, aerospace engineering, computer engineering, and industrial engineering. Engineers commonly transition to management positions in business and industry, start their own companies, or use their engineering degree to facilitate movement into other professional fields such as patent law and medicine.

Career Titles

Some common career titles of this field are engineer, patent attorney and chief executive officer (CEO).

Engineering A.S. Curriculum

Required Courses

ENGR 1500	Introduction to Engineering	(2cr)
ENGR 1411	Engineering Physics I	(5cr)
ENGR 1412	Engineering Physics II	(5cr)

Students must take an additional 21 credits from the following list: Note: The courses students select in this area may be dependent upon the college/university and major they choose.

BIOL 1431	General Biology I	(5cr)
CHEM 1425	Chemical Principles II	(5cr)
ECON 2401	Principles of Economics-Macro . . .	(3cr)
ECON 2402	Principles of Economics-Micro . . .	(3cr)
ENGR 1560	Digital Logic Design	(3cr)
ENGR 2547	Statics	(3cr)
ENGR 2548	Dynamics	(3cr)
ENGR 2549	Mechanics of Materials	(3cr)
ENGR 2569	Circuits Analysis I	(4cr)
ENGR 2570	Circuits Analysis II	(3cr)
MATH 2457*	Linear Algebra	(3cr)
MATH 2458*	Multivariable Calculus	(4cr)
MATH 2459*	Differential Equations	(4cr)
MDFT 1356	Engineering Graphics	(2cr)

Total 33 Credits

General Education

ENGL 1410	Composition I	(4cr)
CHEM 1424	Chemical Principles I	(5cr)
MATH 1477	Calculus I	(5cr)
MATH 1478	Calculus II	(5cr)

Students must also take a minimum of 12 credits from any three (3) of the following goals of the MN General Education Transfer Curriculum: 5, 6, 7, 8, 9, or 10.

Note: The courses students select in this area may be dependent upon the college/university and major they choose.

Additional General Education	(12cr)
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Total 31 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

MACHINE TOOL TECHNOLOGY



Career Description

The machine shop technologist does precise creation and modification of metal parts. In this program, students learn how to use machines to make various parts for the repair, design, or manufacture of other products. Most jobs are in manufacturing settings and in a variety of industries, including aerospace, medical, and paper. Math, computer, and engineering skills are important in this field but machinists also use a creative side to solve problems and make new designs. Machinists work with their hands to create and fix tools and machines and work on parts that are cast, formed, shaped, or molded. They also work on parts that are heat treated, cut, or twisted. In addition, you can work on parts that are pressed, fused, stamped, or worked.

Program Information

In our Machine Tool Technology Program you will learn how to use hand tools, power machinery, and computerized equipment. In addition, you will learn how to use lathes and mills. Our one-year diploma curriculum includes the use computer-aided-drafting and design software. Instruction takes place in a well-equipped shop for a hands-on, practical experience.

Program Learning Outcomes

Graduates will be able to:

- Read and interpret a mechanical working drawing.
- Perform precision measurement, layout, drilling, sawing, turning, milling, and precision grinding safely
- Perform shop calculations
- Program, setup and operate a computer numerical control (CNC) turning center and machining center
- Anticipate, choose and troubleshoot the proper tooling based on manufacturing requirements.
- Manufacture assemblies to specification
- Apply effective communication and interpersonal skills in machining industry

Accreditation

The Machine Tool Technology Program received official designation as a National Institute for Metalworking Skills Accredited Training in 2002.

Career Titles

Some examples of careers graduates can go into after completing this program include numerical control machine operator, CNC programmer, robotic machine operator, numerical control drill press operator, lathe operator, automated cutting machine operator, machinist tool and die, precision instrument maker, and tool maker.

Employment Opportunities

Companies are switching to computer-controlled machines because they improve quality and lower costs. Because our program includes advanced courses in CNC and Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM), the graduate is prepared for career opportunities, including the growth industries associated with plastics.

MACHINE TOOL TECHNOLOGY

Machine Tool Technology

A.A.S. Curriculum

First Year - Fall Semester

MATH 1500 Applied Mathematics (3cr)

RAST 1120 Intro to Engineering Graphics (2cr)
OR

MTRD 1120 Intro to Engineering Graphics (2cr)

MTRD 1160 CNC Setup & Operation (4cr)

MTRD 1215 Intro to Milling Operations (3cr)

MTRD 1221 Intro to Lathe Operations (2cr)

MTRD 1265 CNC Programming &
Process Planning (2cr)

RAST 1110 Introduction to Manufacturing (2cr)

Total 18 Credits

Spring Semester

MTRD 2154 CNC Operations (3cr)

MTRD 2160 CAD/CAM (3cr)

MTRD 2162 Workholding & Fixturing (3cr)

MTRD 2221 CNC Milling Operations (5cr)

MTRD 2223 CNC Turning Operations (2cr)

RAST 2150 Introduction to Robot Operations (2cr)

Total 18 Credits

Summer Session

MTRD 2141 Geometric Tolerancing (1cr)

MTRD 2144 Advanced CAD/CAM (2cr)

MTRD 2145 Advanced CNC
Milling Operations (3cr)

MTRD 2147 Advanced CNC
Turning Operations (2cr)

Total 8 Credits

Second Year - Fall Semester

General Education (16cr)

Total 16 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Machine Tool Technology

Diploma Curriculum

First Year - Fall Semester

MATH 1500 Applied Mathematics (3cr)

RAST 1120 Intro to Engineering Graphics (2cr)
OR

MTRD 1120 Intro to Engineering Graphics (2cr)

MTRD 1160 CNC Setup & Operation (4cr)

MTRD 1215 Intro to Milling Operations (3cr)

MTRD 1221 Intro to Lathe Operations (2cr)

MTRD 1265 CNC Programming &
Process Planning (2cr)

RAST 1110 Introduction to Manufacturing (2cr)

Total 18 Credits

Spring Semester

MTRD 2154 CNC Operations (3cr)

MTRD 2160 CAD/CAM (3cr)

MTRD 2162 Workholding & Fixturing (3cr)

MTRD 2221 CNC Milling Operations (5cr)

MTRD 2223 CNC Turning Operations (2cr)

RAST 2150 Introduction to Robot Operations (2cr)

Total 18 Credits

Summer Session

MTRD 2141 Geometric Tolerancing (1cr)

MTRD 2144 Advanced CAD/CAM (2cr)

MTRD 2145 Advanced CNC
Milling Operations (3cr)

MTRD 2147 Advanced CNC
Turning Operations (2cr)

Total 8 Credits

GRADUATION REQUIREMENT 44 CREDITS

*Denotes Prerequisites

MANUFACTURING MAINTENANCE TECHNICIAN

Career Description

Maintenance machinists clean, oil, and maintain the machine tools. They also repair or make new parts for existing machinery. Skilled manufacturing maintenance technicians are needed to keep the complex industrial machinery of today's manufacturing facilities running smoothly. Their work keeps factories productive and makes sure that the final product is perfect. Their work assures that machine operators are safe.

A manufacturing maintenance technician is often responsible for performing entry-level to complex troubleshooting and repair techniques on manufacturing equipment and electrical/electronic or mechanical systems. As a technician you will be responsible for analyzing, troubleshooting, maintaining, and repairing complex equipment. To advance in this career, maintenance machinists should gain proficiency with basic mechanical/hydraulic and pneumatic concepts related to machine tools.

Program Information

The Manufacturing Maintenance Technician Diploma Program at Central Lakes College provides a comprehensive foundation to get you started as a technician suited to work in any industrial plant where precision, efficiency, and safety are valued. You will learn skills in electronics, mechanical systems, and troubleshooting to become qualified to repair and maintain computerized equipment. Instruction takes place in a well-equipped shop for a hands-on, practical experience. The diploma you earn from CLC will signify your preparation for career opportunities.

Program Learning Outcomes

Upon program completion students will be able to:

- Select correct testing equipment for troubleshooting machine malfunctions.
- Use and understand preventive maintenance procedures.
- Use and understand predictive maintenance procedures.

- Troubleshoot complex electrical control circuits and devices.
- Troubleshoot complex mechanical systems.

Accreditation

The Machine Tool Technology Program at Central Lakes College received official designation as a National Institute for Metalworking Skills Accredited Training in 2002.

Career Titles

Some common career titles in this field include manufacturing maintenance technician, development mechanic, experimental and electrical mechanic, maintenance machinist, maintenance specialist, maintenance technician, and trouble shooter.

Employment Opportunities

Every industrial plant employs manufacturing maintenance technicians. Around the world, industries need skilled maintenance technicians to help factories run better and stay competitive in our global economy. A CLC graduate with strong mechanical and electrical skills and experience with programmable logic controls (PLC) is in demand by international manufacturers. The Bureau of Labor Statistics says a "serious lack of skilled labor" will grow to 14 million by 2015. Now is the time to be in such a reduced – and valued labor pool.

MANUFACTURING MAINTENANCE TECHNICIAN

Manufacturing Maintenance Technician Diploma Curriculum

First Year - Fall Semester

MATH 1500	Applied Mathematics	(3cr)
RAST 1120	Intro to Engineering Graphics	(2cr)
OR		
MTRD 1120	Intro to Engineering Graphics	(2cr)
MTRD 1160	CNC Setup and Operation	(4cr)
MTRD 1215	Intro to Milling Operations	(3cr)
MTRD 1221	Intro to Lathe Operations	(2cr)
RAST 1110	Intro to Manufacturing	(2cr)

Total 16 credits

Spring Semester

MTRD 2160	CAD/CAM	(3cr)
MTRD 2162	Workholding and Fixturing	(3cr)
MTRD 2221	CNC Milling Operations	(5cr)
MTRD 2223	CNC Turning Operations	(2cr)
RAST 1109	Computers in Industry	(2cr)

Total 15 Credits

Second Year - Fall Semester

RAST 1101	Industrial Electronics I	(3cr)
RAST 1111	Industrial Electronics Lab I	(2cr)
RAST 1104	Introduction to Robotics	(2cr)
	General Education	(3cr)
	Elective	(5cr)

Total 15 Credits

Spring Semester

RAST 1102*	Industrial Electronics II	(3cr)
RAST 1103*	Motors & Drives	(3cr)
RAST 1113*	Motors & Drives Lab	(3cr)
RAST 1206*	Programmable Logic Controllers	(3cr)
RAST 1212*	Industrial Electronics Lab II	(2cr)

Total 14 Credits

Summer Session

RAST 2106*	Industrial Electronics III	(2cr)
RAST 2116	Industrial Electronics Lab III	(2cr)

Total 4 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

Manufacturing Maintenance Technician Certificate Curriculum

First Year - Fall Semester

MATH 1500	Applied Mathematics	(3cr)
RAST 1120	Intro to Engineering Graphics	(2cr)
OR		
MTRD 1120	Intro to Engineering Graphics	(2cr)

MTRD 1160	CNC Setup and Operation	(4cr)
MTRD 1215	Intro to Milling Operations	(3cr)
MTRD 1221	Intro to Lathe Operations	(2cr)
MTRD 1265	CNC Programming and Process Planning	(2cr)
RAST 1110	Introduction to Manufacturing	(2cr)

Total 18 Credits

GRADUATION REQUIREMENT 18 CREDITS

*Denotes Prerequisites

MANUFACTURING WELDING TECHNICIAN

Career Description

Skilled welding, soldering, and brazing workers generally plan work from drawings or specifications, or they use their knowledge of fluxes and base metals to analyze the parts to be joined. Highly skilled welders work with a wide variety of materials in addition to steel, such as titanium, aluminum, or plastics.

Program Information

Students in the Manufacturing Welding Technician Diploma Program will earn credits at both the Brainerd and Staples campuses. Courses in blueprint reading, shop mathematics, and mechanical drawing are among the essential requirements for obtaining skills sought by employers. Central Lakes College offers a comprehensive foundation to get you started as a technician suited to work in any industrial plant where precision, efficiency, and safety are valued. Instruction takes place in a well-equipped shop for a hands-on, practical experience.

Program Learning Outcomes

Graduates will be able to:

- Read and interpret a mechanical and fabrication design and working drawing
- Perform precision measurement, layout, drilling, sawing, cutting, welding, turning, milling, and precision grinding safely
- Program, setup and operate a computer numerical control (CNC) turning center and machining center
- Identify proper welding consumables and fluxes for a selected process
- Perform a variety of welding processes using appropriate equipment and setup procedures and for GMAW, SMAW, GTAW, and OAW
- Apply principles of basic welding fundamentals, symbols, blueprints and welding metallurgy
- Demonstrate effective written and oral communication skills

Accreditation

The Machine Tool Technology Program at CLC received official designation as a National Institute for Metalworking Skills Accredited Training in 2002.

Certification

Job opportunities and advancement can be enhanced by becoming certified in a particular machining skill. The National Institute for Metalworking Skills has developed standards for machine setters, operators, and metal tenders. After taking a course approved by the organization and passing a written exam and performance requirement, the worker is issued a credential that signifies competence in a specific machining operation.

Employment Opportunities

Job prospects should be excellent over the next ten years as employers report difficulty finding enough qualified people. In addition, many openings are expected to arise as a large number of workers retire over the next decade. The construction industry is expected to have solid growth over the next decade and an increasing demand for welders. Government funding for shipbuilding as well as for infrastructure repairs and improvements are expected to generate additional welding jobs.

MANUFACTURING WELDING TECHNICIAN

Manufacturing Welding Technician Diploma

Curriculum

First Year - Brainerd Courses

First Semester

MASE 1109 Trade & Industry Math (2cr)
 AND
 WELD 1350 Open Lab (1cr)
 OR
 ***MATH 1500 Applied Math (3cr)

WELD 1100 Intro to Welding (2cr)
 WELD 1101 Shielded Metal ARC Welding (4cr)
 WELD 1109 Shearing, Punching & Cutting Systems (1cr)
 WELD 1111 Blueprint Reading (2cr)
 General Education..... (3cr)

Total 15 Credits

Second Semester

MASE 1106 Intro to Electronics (2cr)
 WELD 1115 Gas Tungsten ARC Welding. (4cr)
 WELD 1128* Metal Fabrication. (4cr)
 WELD 1130* Advanced Welding Processes. (4cr)
 WELD 1140 Trade Knowledge (2cr)
 General Education..... (3cr)

Total 19 Credits

Second Year - Staples Courses

First Semester

RAST 1120 Intro to Engineering Graphics. (2cr)
 OR
 MTRD 1120 Intro to Engineering Graphics. (2cr)

MTRD 1160 CNC Setup and Operation (4cr)
 MTRD 1215 Intro to Milling Operations. (3cr)
 MTRD 1221 Intro to Lathe Operations (2cr)
 MTRD 1265 CNC Programming and Process Planning (2cr)
 RAST 1110 Intro to Manufacturing (2cr)

Total 15 Credits

Second Semester

RAST 2150 Introduction to Robot Operations (2cr)
 MTRD 2160 CAD/CAM (3cr)
 MTRD 2162 Workholding and Fixturing (3cr)
 MTRD 2221 CNC Milling Operations (5cr)
 MTRD 2223 CNC Turning Operations (2cr)

Total 15 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

*** Math class is determined by First Semester Emphasis (i.e., Machine Trades or Welding) If 1109 is taken student must take 1 credit of open lab (WELD 1350).

MECHATRONICS

Career Description

The term mechatronics is defined as a multidisciplinary engineering system design. It does not split engineering into separate disciplines. Mechatronics is the integration of mechanical and electrical systems. For firms with advanced manufacturing equipment, the mechatronics technician plays an increasingly important role. Those trained to work in this field must have skills in electricity, electronics, instrumentation, programmable logical controllers, microprocessors, automation and robotics. These skills enable the professional to perform many different jobs in various industries.

Program Information

The 38-credit diploma program is designed to prepare students for entry-level technician positions in the areas of robotics, industrial manufacturing, instrumentation, electronics, and process control automation. Courses cover industrial electronics, electrical motor control, AC/DC electronics, process control, computer-aided design, programmable controllers, computers, manufacturing, transducers, and fluid power.

Program Learning Outcomes

Graduates will be able to:

- Identify and apply appropriate safety procedures
- Apply knowledge and skills in electrical systems found
- Apply knowledge and skills in mechanical systems
- Apply knowledge and skills in creating program code
- Test and debug complex automated equipment to machine specifications
- Troubleshoot complex electrical circuits and machine control programs

Career Titles

Industrial automation technician, electronics technician, maintenance technician, field service technician, instrumentation and engineering technician, mechatronics engineer.

Employment Opportunities

Multi-skilled mechatronics students can find work in industries that involve control architecture electronics, mechanics, and computing. The Mechatronics program prepares students for careers requiring specialized skills in electricity, electronics, instrumentation, programmable logical controllers, microprocessors, automation and robotics.

Mechatronics Diploma Curriculum

Fall Semester

MATH 1500 Applied Mathematics (3cr)

RAST 1120 Intro to Engineering Graphics (2cr)

OR

MTRD 1120 Intro to ENgineering Graphics (2cr)

RAST 1101 Industrial Electronics I (3cr)

RAST 1104 Introduction to Robotics (2cr)

RAST 1110 Intro to Manufacturing (2cr)

RAST 1111 Industrial Electronics Lab I (2cr)

Total 14 Credits

Spring Semester

RAST 1102* Industrial Electronics II (3cr)

RAST 1103* Motors and Drives (3cr)

RAST 1113* Motors & Drives Lab (3cr)

RAST 1206* Programmable Logic Controllers . . (3cr)

RAST 1212* Industrial Electronics Lab II (2cr)

RAST 1109 Computers in Industry (2cr)

RAST 2105* Transducers (2cr)

RAST 2165* Fluid Power (2cr)

Total 20 Credits

Summer Session

RAST 2106* Industrial Electronics III (2cr)

RAST 2116 Industrial Electronics Lab III (2cr)

Total 4 Credits

GRADUATION REQUIREMENT 38 CREDITS

ROBOTICS/AUTOMATED SYSTEMS TECHNOLOGY**Career Description**

Robotic automated systems technicians are an integral part of modern manufacturing firms. Knowledge of robotic programming, flexible manufacturing, CAD systems, industrial communications and overall system integration is essential. Technologies such as new generation robot controllers, sensors, and electrical control systems have created a need for highly specialized training. Career opportunities abound for robotic technicians in the building, repairing, installing, maintaining, and programming, along with problem solving in engineering and design of robotic automated systems.

Program Description

The Robotics Automated Systems Technology Program uses a curriculum of technical industry standards set forth by Robotics Industry Association (RIA) along with a strong industrial advisory board made up of industry leaders in the different manufacturing career areas. Our graduates are employed as field service engineering, installation, and engineering technicians, applications programmers and automated systems maintenance technicians. We are the largest robotics automated systems lab in the upper Midwest. Students are trained on the same robots, controllers, and programming languages used by automated manufacturing companies.

Program Learning Outcomes

Graduate will be able to:

- Identify and apply appropriate safety procedures
- Apply knowledge and skills in electrical systems
- Apply knowledge and skills in mechanical systems
- Apply knowledge and skills in creating program code
- Analyze and apply specific troubleshooting knowledge and technology in the areas of electrical, mechanical, software and program code
- Apply effective communication and interpersonal skills as an individual and as a team member

Accreditation

Robotics Industry Association

Transfer Opportunities

Courses in this program transfer to Bemidji State University, St. Cloud State University, and North Dakota State University.

Career Titles

Some common career titles held by people in this field include field service technician, field service engineer, applications programmers, electrical controls engineers, automated systems technician, automated systems machine builders, production systems technicians.

Selected Employers of Recent Graduates

3-M ABB, Automated Concepts Automations, Brenton Engineering, Delkor, Douglas Machine, Ellison Technologies, Fanuc, Graphics Packaging, Hales, Hegman Machine Tool, Imation, Motoman, PAR Systems, PRI Robotics, Robotics Automation, Tetra Pak, Wolf Robotics

Employment Opportunities

Graduates find abundant employment opportunities in automotive manufacturing, aerospace manufacturers, machine tool companies, welding and fabrication, packaging machinery manufacturers, robotic system integrators, nuclear power plants, and robotic manufacturers.

ROBOTICS/AUTOMATED SYSTEMS TECHNOLOGY

Robotics/Automated Systems Technology A.A.S. Curriculum

First Year - Fall Semester

General Education (7cr)

RAST 1120 Intro to Engineering Graphics (2cr)
OR

MTRD 1120 Intro to Engineering Graphics (2cr)

MTRD 1265 CNC Programming and
Process Planning (2cr)

RAST 1101 Industrial Electronics I (3cr)

RAST 1104 Introduction to Robotics (2cr)

RAST 1109 Computers in Industry (2cr)

RAST 1110 Intro to Manufacturing (2cr)

RAST 1111 Industrial Electronics Lab I (2cr)

Total 22 Credits

Spring Semester

General Education (6cr)

RAST 1102* Industrial Electronics II (3cr)

RAST 1103* Motors and Drives (3cr)

RAST 1113* Motors & Drives Lab (3cr)

RAST 1206* Programmable Logic
Controllers I (3cr)

RAST 1212* Industrial Electronics Lab II (2cr)

Total 20 Credits

Summer Session

RAST 2101* Application Planning & Layout (2cr)

RAST 2106* Industrial Electronics III (2cr)

RAST 2116* Industrial Electronics Lab III (2cr)

Total 6 Credits

Second Year - Fall Semester

General Education (7cr)

RAST 2105* Transducers (2cr)

RAST 2151* Applied Robotics Lab I (6cr)

RAST 2165* Fluid Power (2cr)

RAST 2355* Programmable Logic
Controllers II (2cr)

Total 19 Credits

Spring Semester

RAST 2153* Applied Robotics II (6cr)

RAST 2154* Robot Controller Maintenance (2cr)

RAST 2395* Advanced Robot
Controller Programming (2cr)

RAST 2399* Robotics Internship (1-3cr)

OR

RAST 2399* Independent Study (1-3cr)

Total 11 Credits

GRADUATION REQUIREMENT 78 CREDITS

*Denotes Prerequisites

GRADUATION REQUIREMENT 78 CREDITS

*Denotes Prerequisites

Robotics/Automated Systems Technology Diploma Curriculum

First Year - Fall Semester

RAST 1120 Intro to Engineering Graphics (2cr)
OR

MTRD 1120 Intro to Engineering Graphics* (2cr)

MTRD 1265 CNC Programming and
Process Planning (2cr)

RAST 1101 Industrial Electronics I (3cr)

RAST 1104 Introduction to Robotics (2cr)

RAST 1109 Computers in Industry (2cr)

RAST 1110 Intro to Manufacturing (2cr)

RAST 1111 Industrial Electronics Lab I (2cr)

RAST 1114 Math for Industrial Technology (3cr)

Total 18 Credits

Spring Semester

RAST 1102* Industrial Electronics II (3cr)

RAST 1103* Motors and Drives (3cr)

RAST 1113* Motors & Drives Lab (3cr)

RAST 1206* Programmable
Logic Controllers I (3cr)

RAST 1212* Industrial Electronics Lab II (2cr)

Total 14 Credits

Summer Session

RAST 2101* Application Planning & Layout (2cr)

RAST 2106* Industrial Electronics III (2cr)

RAST 2116* Industrial Electronics Lab III (2cr)

Total 6 Credits

Second Year - Fall Semester

RAST 2105* Transducers (2cr)

RAST 2151* Applied Robotics Lab I (6cr)

RAST 2165* Fluid Power (2cr)

RAST 2355* Programmable
Logic Controllers II (2cr)

General Education (3cr)

Total 15 Credits

Spring Semester

RAST 2153* Applied Robotics II (6cr)

RAST 2154* Robot Controller Maintenance (2cr)

RAST 2395* Advanced Robot
Controller Programming (2cr)

General Education (3cr)

Total 13 Credits

GRADUATION REQUIREMENT 66 CREDITS

*Denotes Prerequisites

WELDING & FABRICATION



Career Description

With four program options, students prepare for a career in the construction, metal fabrication, repair, service, and other metal working industries. Learn arc welding, gas metal arc welding, flux core tig, and the use of oxyacetylene hand and machine cutting equipment. In addition, students will learn to use the hand and computer numerically controlled (CNC) plasma cutting machine.

Program Information

The Welding and Fabrication Program introduces blueprint reading for welders. Upon completion of the program, students will be ready to take welding certification and job entry tests.

Program Learning Outcomes

Graduates will be able to:

- Apply proper industry safety standards
- Apply welding & cutting safety procedures
- Identify proper welding consumables and fluxes for a selected process
- Perform a variety of welding processes using appropriate equipment and setup procedures and for GMAW, SMAW, GTAW, and OAW
- Apply principles of basic welding fundamentals, symbols, blueprints and welding metallurgy

- Design and execute fabrication projects to specifications
- Read and interpret fabrication blueprints and drawings
- Demonstrate effective written and oral communication skills

Admissions

The Welding and Fabrication Program is offered as a full-time day program. It is best to begin this program Fall semester.

Transfer Opportunities

Some welding courses can be transferred to a variety of the four-year colleges. Because each college has its own requirements, check with a counselor about transferability.

Career Titles

Some common career titles for people in this field are production welder, welder fabrication person, metal fabrication person, shop foreman in fabrication, welding shop foreman, welding shop owner or manager, welding supply salesperson, and welding product salesperson.

Employment Opportunities

Graduates have found employment in a wide variety of occupations, ranging from pipe welding in construction projects to opportunities in manufacturing.

WELDING & FABRICATION

Welding & Fabrication

A.A.S. Curriculum

First year - Fall Semester

CCST 1530	Employment Strategies	(3cr)
MASE 1109	Trade & Industry Math	(2cr)
WELD 1100	Intro to Welding	(2cr)
WELD 1101	Shielded Metal ARC Welding	(4cr)
WELD 1111	Blueprint Reading	(2cr)
WELD 1114	Metallurgy & Fabrication	(2cr)
WELD 1117	Gas Metal ARC Welding	(3cr)

Total 18 Credits

Spring Semester

MASE 1106	Intro to Electronics	(2cr)
WELD 1112	Blueprint Reading II	(2cr)
WELD 1115	Gas Tungsten ARC Welding	(4cr)
WELD 1128*	Metal Fabrication	(4cr)
WELD 1132	Testing/Codes & Inspection	(2cr)
WELD 1134	Welding Qualification	(2cr)
WELD 1140	Trade Knowledge	(2cr)

Total 18 Credits

Summer Semester

WELD 1130*	Advanced Welding Processes	(4cr)
WELD 1150	Advanced Metal Fabrication	(4cr)

Total 8 Credits

Second Year - Fall Semester

General Education	(8cr)
Electives	(4cr)

Total 12 Credits

Spring Semester

General Education	(8cr)
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Total 8 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

Welding & Fabrication

Diploma Curriculum

Fall Semester

CCST 1530	Employment Strategies	(3cr)
MASE 1109	Trade & Industry Math	(2cr)
WELD 1100	Intro to Welding	(2cr)
WELD 1101	Shielded Metal ARC Welding	(4cr)
WELD 1111	Blueprint Reading	(2cr)
WELD 1114	Metallurgy & Fabrication	(2cr)
WELD 1117	Gas Metal ARC Welding	(3cr)

Total 18 Credits

Spring Semester

MASE 1106	Intro to Electronics	(2cr)
WELD 1112	Blueprint Reading II	(2cr)
WELD 1115	Gas Tungsten ARC Welding	(4cr)
WELD 1128*	Metal Fabrication	(4cr)
WELD 1132	Testing/Codes & Inspection	(2cr)
WELD 1134	Welding Qualification	(2cr)
WELD 1140	Trade Knowledge	(2cr)

Total 18 Credits

Summer Semester

WELD 1130*	Advanced Welding Processes	(4cr)
WELD 1150	Advanced Metal Fabrication	(4cr)

Total 8 Credits

GRADUATION REQUIREMENT 44 CREDITS

*Denotes Prerequisites

COMMUNICATION ART & DESIGN



Career Description

A graphic designer is a creative problem solver who is trained to conceive, plan, and execute a design that communicates a direct message to an audience in an imaginative and visually arresting manner. Effective visual communication requires a graphic designer to communicate ideas and information in ways that will get the attention of and motivate a viewer. Ideas are generated through a design process in which graphic designers research, organize, and interpret the information; define the objectives; originate ideas; and create new visual forms.

New and constantly evolving computer and communication technologies further challenge the role of the graphic designer in creating imaginative and clear messages for vastly different audiences. Meeting this challenge requires use of the best media tools for development and delivery of ideas and information: print, photography, packaging, logos, publications, the Internet, film, television, 3D Modeling, and animation.

Program Information

In the Communication Art and Design Program, students will take visual ideas from initial concept through creative and technical development and, ultimately, to a final form

that is ready for production. Various tools are used, from hand tools for illustration to the latest computerized aids. We focus on projects modeled with industry realities, relevant to high-impact, effective communication.

Program Learning Outcomes

Graduates will be able to:

- Select appropriate software tools to achieve effective design solutions
- Communicate design concepts at various stages of development using the design process
- Develop print and multimedia concepts using traditional, computer-based and video design tools
- Develop and present creative portfolios verbally and in writing to clients
- Interact with clients, marketing, copy writers, web designers, photographers, and printing companies
- Demonstrate a respect for diversity of ideas and concepts in a group environment

Transfer Opportunities

Students have the opportunity to transfer to Bemidji State University and finish a four-year Bachelor of Arts in Design Technology with an emphasis in Digital Design/Print, Digital Design/Electronic or Exhibit Design.

Career Titles

Common career titles in this field include advertising agency designer, multimedia designer, corporate in-house designer, illustrator, print designer, art director, package designer, poster/billboard designer, website designer, magazine designer, video editor, book designer, 3D modeling and animation consultant/designer, and newspaper designer.

Employment Opportunities

There are many employment opportunities in Minnesota for people in the communication art and design field. The Twin Cities, Duluth, Brainerd, and St. Cloud are some of the hot spots in the area for jobs in this field.

COMMUNICATION ART & DESIGN

Communication Art & Design

A.A.S. Curriculum

First Year - Fall Semester

CART 1100	Design & Layout I	(4cr)
CART 1110	Adobe PhotoShop	(2cr)
CART 1112	Adobe Illustrator	(2cr)
CART 1114	Page Layout	(2cr)
CART 1124	Corporate ID	(3cr)
	General Education	(3cr)

Total 16 Credits

Spring Semester

CART 1102	Design & Layout II	(4cr)
CART 1118	Website Construction	(2cr)
CART 1120	Publication Design	(3cr)
MATH 1500	Applied Math	(3cr)
	General Education	(7cr)

Total 19 Credits

Second Year - Fall Semester

CART 2100	Design & Layout III	(4cr)
CART 2111	Computer Graphics I	(3cr)
CART 2114	3 D Modeling and Design	(3cr)
CART 2118	Advanced Website Construction	(2cr)
CART 2120	Packaging	(3cr)
	General Education	(3cr)

Total 18 Credits

Spring Semester

CART 2102	Design & Layout IV	(4cr)
CART 2112	Computer Graphics II	(3cr)
CART 2113	Art Direction	(4cr)
CART 2124	Portfolio Production	(2cr)
	General Education	(6cr)

Total 19 Credits

GRADUATION REQUIREMENT 72 CREDITS

Communication Art & Design

Diploma Curriculum

First Year - Fall Semester

CART 1100	Design & Layout I	(4cr)
CART 1110	Adobe Photoshop	(2cr)
CART 1112	Adobe Illustrator	(2cr)
CART 1114	Page Layout	(2cr)
CART 1115	Illustration	(2cr)
CART 1124	Corporate ID	(3cr)
	General Education	(3cr)

Total 18 Credits

Spring Semester

CART 1102	Design & Layout II	(4cr)
CART 1118	Website Construction	(2cr)
CART 1120	Publication Design	(3cr)
CART 1136	Copywriting	(3cr)
MATH 1500	Applied Math	(3cr)

Total 15 Credits

Second Year - Fall Semester

CART 2100	Design & Layout III	(4cr)
CART 2111	Computer Graphics I	(3cr)
CART 2114	3 D Modeling and Design	(3cr)
CART 2118	Advanced Website Construction	(2cr)
CART 2120	Packaging	(3cr)

Total 15 Credits

Spring Semester

CART 2102	Design & Layout IV	(4cr)
CART 2112	Computer Graphics II	(3cr)
CART 2113	Art Direction	(4cr)
CART 2124	Portfolio Production	(2cr)
CART 2128	Video Editing	(3cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

Media Technology

Diploma Curriculum

Fall Semester

CART 1100	Design & Layout I	(4cr)
CART 1110	Adobe Photoshop	(2cr)
CART 1112	Adobe Illustrator	(2cr)
CART 1114	Page Layout	(2cr)
CART 2114	3 D Modeling & Design	(3cr)
CART 2118	Advanced Website Construction	(2cr)

Total 15 Credits

Spring Semester

CART 1118	Website Construction	(2cr)
CART 1126	Media Lighting and Sound	(4cr)
CART 1128	Media Production	(4cr)
CART 2128	Video Editing	(3cr)
CART 2310	3D Animation	(3cr)

Total 16 Credits

GRADUATION REQUIREMENT 31 CREDITS

PHOTOGRAPHIC IMAGING TECHNOLOGY



Career Description

Photo imaging students develop foundational imaging and workplace skills sought by employers. The curriculum includes general and studio photography, digital file manipulation and management, lighting, photo print production, print finishing, software, video and editing, color science, and principles of sales, marketing, and customer service. The program serves a broad range of industries to include the photo and graphics industry, now called imaging. Demand for trained technical personnel is high.

Program Information

The Photographic Imaging Technology Program offers an Associate of Applied Science (A.A.S.) Degree that consists of an ambitious, technical core in imaging and components of general education. A related option, with fewer general education requirements, is the Photographic Imaging Technology Diploma Program. Finally, there is a Certificate in Matting & Framing where students develop skills in finishing and presentation of art. Students choose a program option to meet their specific career goals.

Program Learning Outcomes

Graduate will be able to:

- Demonstrate professional responsibility toward workplace safety
- Select and use photographic software, equipment and technologies appropriate to the task
- Apply concepts and aesthetics to create and evaluate photographic images
- Effectively develop proposals and organize photo shoots
- Work as a team member demonstrating dependability, flexibility, communication and management skills
- Model professional and ethical behavior

Special Program Requirements

Windows XP Pro Laptop and a Digital SLR camera

Accreditation

Photo Marketing Association, International Professional Photographers Association, Digital Imaging Association, Association of Imaging Executives

Certification

Society of Photofinishing Engineers and Certified Photographic Consultant

Transfer Opportunities

Students have the opportunity to transfer into programs like marketing, management, mass communications, business and education at Bemidji State University, Minnesota State University Moorhead, Minnesota State University Mankato, North Dakota State University, and the University of Wisconsin Stout.

Employment Opportunities

Graduates accept employment nationwide as computer imaging and editing specialists, quality control personnel, studio and event photographers, lab equipment operators, lab maintenance, custom framers, lab management, and more. Imaging is a fast-paced, ever changing industry. Excitement is ever present in one of the most innovative industries in the world.

PHOTOGRAPHIC IMAGING TECHNOLOGY

Matting & Framing Certificate Curriculum

PHIM 1119	Imaging Applications	(3cr)
PHIM 1172	Photo Print Systems	(4cr)
PHIM 1176*	Visual Relationships	(3cr)
PHIM 2296	Corporate Communication & Presentations	(4cr)

Total 14 Credits

GRADUATION REQUIREMENT 14 CREDITS

*Denotes Prerequisites

Photographic Imaging Technology A.A.S. Curriculum

First Year - Fall Semester

PHIM 1114	Digital Darkroom	(4cr)
PHIM 1122	Photo Composition	(2cr)
PHIM 1160	Basic Photo & Processing	(3cr)
PHIM 1164	Survey of Imaging	(2cr)
PHIM 1172	Photo Printing Systems	(4cr)
	General Education	(3cr)

Total 18 Credits

Spring Semester

PHIM 1120	Media Productions	(3cr)
PHIM 1174	Studio Photographics	(4cr)
PHIM 1176*	Visual Relationships	(3cr)
PHIM 1284	Digital & Video Photographics	(4cr)
	General Education	(3cr)

Total 17 Credits

Second Year - Fall Semester

PHIM 2110*	Color Management Systems	(4cr)
PHIM 2112*	Fine Art Printing	(4cr)
PHIM 2286	Outdoor Photography	(2cr)
	General Education	(9cr)

Total 19 Credits

Spring Semester

PHIM 2111	Art Direction	(4cr)
PHIM 2175*	Photographic Certification & Business	(4cr)
PHIM 2276*	Photo Economics	(3cr)
PHIM 2296*	Corporate Communication & Presentations	(4cr)
	General Education	(3cr)

Total 18 Credits

GRADUATION REQUIREMENT 72 CREDITS

*Denotes Prerequisites

Photographic Imaging Diploma Curriculum

First Year - Fall Semester

PHIM 1114	Digital Darkroom	(4cr)
PHIM 1122	Photo Composition	(2cr)
PHIM 1160	Basic Photo & Processing	(3cr)
PHIM 1164	Survey of Imaging	(2cr)
PHIM 1172	Photo Printing Systems	(4cr)

Total 15 Credits

Spring Semester

PHIM 1120	Media Productions	(3cr)
PHIM 1174	Studio Photographics	(4cr)
PHIM 1176*	Visual Relationships	(3cr)
PHIM 1284	Digital & Video Photographics	(4cr)
	General Education	(3cr)

Total 17 Credits

Second Year - Fall Semester

PHIM 1119	Matting & Framing	(3cr)
PHIM 2110*	Color Management Systems	(4cr)
PHIM 2112*	Fine Art Printing	(4cr)
PHIM 2286	Outdoor Photography	(2cr)
	General Education	(3cr)

Total 16 Credits

Spring Semester

PHIM 1199	Special Topics	(1cr)
PHIM 2111	Art Direction	(4cr)
PHIM 2175*	Photographic Certification & Business	(4cr)
PHIM 2276*	Photo Economics	(3cr)
PHIM 2296*	Corporate Communication & Presentations	(4cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

PHOTOGRAPHIC EQUIPMENT & TECHNICAL SERVICES



Career Description

Photo imaging students develop foundational imaging and workplace skills sought by employers. The curriculum includes general and studio photography, digital file manipulation and management, lighting, photo print production, print finishing, software, video and editing, color science, principles of sales, marketing, and customer service. The program serves a broad range of industries that include the photo and graphics industry, now called imaging. Demand for trained technical personnel is high.

Program Information

The Photo Equipment and Technical Services Program consists of an ambitious, technical core in imaging and components of general education. Students in this program take courses in troubleshooting, maintenance, and electronics, in addition to an imaging core. Central Lakes College also offers related options in this field, including an Associate of Applied Science (A.A.S.) or Diploma in Photographic Imaging Technology or a Certificate in Matting and Framing. Students choose a program option to meet their specific career goals.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate professional responsibility toward workplace safety
- Select and use photographic software, equipment and technologies appropriate to the task
- Apply concepts and aesthetics to create and evaluate photographic images
- Effectively develop proposals and organize photo shoots
- Analyze and apply specific knowledge and technology in electrical systems and networking
- Work as a team member demonstrating dependability, flexibility, communication and management skills
- Model professional and ethical behavior

Special Program Requirements

Windows XP Pro Laptop and a Digital SLR camera

Accreditation

Photo Marketing Association International Professional Photographers, Association Digital Imaging Association, Association of Imaging Executives

Certification

Society of Photofinishing Engineers and Certified Photographic Consultant

Transfer Opportunities

Students have the opportunity to transfer into programs like marketing, management, mass communication, business and education at Bemidji State University, Minnesota State University Moorhead, Minnesota State University Mankato, North Dakota State University, and University of Wisconsin Stout.

PHOTOGRAPHIC EQUIPMENT & TECHNICAL SERVICES

Employment Opportunities

Graduates accept employment nationwide as computer imaging and editing specialists, quality control personnel, studio and event photographers, lab equipment operators, lab maintenance, custom framers, lab management, and more. Imaging is a fast-paced, ever changing industry. Excitement is ever present in one of the most innovative industries in the world.

Photographic Equipment & Technical Services**A.A.S. Curriculum****First Year - Fall Semester**

PHIM 1114	Digital Darkroom.....	(4cr)
PHIM 1160	Basic Photo & Processing	(3cr)
PHIM 1164	Survey of Imaging.....	(2cr)
PHIM 1172	Photo Printing Systems	(4cr)
	General Education.....	(6cr)

Total 19 Credits**Spring Semester**

PHIM 1174	Studio Photographics.....	(4cr)
PHIM 1176	Visual Relationships	(3cr)
PHIM 1284	Digital Photographics.....	(4cr)
	General Education.....	(6cr)

Total 17 Credits**Second Year- Fall Semester**

PHIM 2110*	Color Management Systems	(4cr)
PHIM 2112*	Fine Art Printing	(4cr)
RAST 1101	Industrial Electronics Lab I	(3cr)
RAST 1111	Industrial Electronics Lab I	(2cr)
	General Education.....	(4cr)

Total 17 Credits**Spring Semester**

PHIM 2175*	Photographic Certification & Business	(4cr)
PHIM 2276*	Photo Economics.....	(3cr)
PHIM 2296*	Corporate Communication & Presentations	(4cr)
RAST 1102*	Industrial Electronics II.....	(3cr)
RAST 1212*	Industrial Electronics Lab II.....	(2cr)
	General Education.....	(3cr)

Total 19 Credits

GRADUATION REQUIREMENT 72 CREDITS

*Denotes Prerequisites

VIDEOGRAPHY PRODUCTION



Career Description

Videography is quickly becoming one of the fastest growing career choices in the 21st century. Videography production is the professional process of capturing stories through a series of recorded, filmed images using digital media. Television, video, and motion picture camera operators produce images that tell a story, inform or entertain an audience, or record an event. Film and video editors edit soundtracks, film and video for the motion picture, cable and broadcast television industries.

Camera operators employed in the entertainment field use digital media to film movies, television programs, events, and commercials. Studio camera operators work in a broadcast studio and usually videotape their subjects from a fixed position. News camera operators, also called electronic news-gathering (ENG) operators, work as part of a reporting team, following newsworthy events as they unfold.

Program Information

Students in the Videography Production A.A.S. or Diploma Program will learn the proper techniques for shooting footage, capturing stories using digital media, organizing video clips and editing footage to develop a finished production. Students take courses

in media production, lighting, sound and creative software suites, digital photography, scripting, producing and directing. Students will develop the skills needed to professionally capture and manipulate video footage using audio sound rooms, video production studios, the latest creative software suites and high tech computer labs.

Program Learning Outcomes

Graduates will be able to:

- Apply video working protocol and safety
- Recognize and apply knowledge in script writing, camera operation, sound recording, editing and production design for video applications
- Utilize video production equipment and software programs used in videography applications and creating special effects
- Analyze and apply appropriate lighting techniques for project shots
- Encode files for distribution and production of master tapes and DVD's

Transfer Opportunities

Students have an opportunity to transfer courses and earn a Bachelor of Arts in Design Technology at Bemidji State University.

Career Titles

Some common career titles for this field include visual effects editor, videographer, producer, graphics designer, key grip, editor, director, cinematographer, broadcast designer, location manager, and writer.

Employment Opportunities

There are many job opportunities in this field within and outside of Minnesota. The Twin Cities area is one of the hot spots in the area for jobs in this field. Brainerd, Duluth and St. Cloud are also excellent places to find placement.

VIDEOGRAPHY PRODUCTION

Videography Production

A.A.S. Curriculum

First Year - Fall Semester

CART 1126	Media Lighting and Sound.	(3cr)
ENGL 1422	Practical Writing	(3cr)
VPRO 1110	Video Workflow.	(4cr)
VPRO 1112	Basic Camera	(3cr)
	General Education.	(3cr)

Total 16 Credits

Spring Semester

CART 1100	Adobe Photoshop	(2cr)
CART 2128	Video Editing	(3cr)
VPRO 1100	Media Scriptwriting.	(3cr)
	General Education.	(6cr)

Total 14 Credits

Second Year - Fall Semester

CART 1128	Media Production	(4cr)
CART 2114	3D Modeling.	(3cr)
VPRO 2110	Advanced Camera.	(3cr)
VPRO 2112	Advanced Video Editing	(3cr)
	General Education.	(3cr)

Total 16 Credits

Spring Semester

VPRO 2120	Interactive Design Production.	(3cr)
VPRO 2130	Creative Development	(5 cr)
VPRO 2140	Business of Videography	(3cr)
VPRO 2150	Studio Productions	(3cr)

Total 14 Credits

GRADUATION REQUIREMENT 60 CREDITS

Videography Production

Diploma Curriculum

First Year - Fall Semester

CART 1126	Media Lighting and Sound.	(3cr)
ENGL 1422	Practical Writing	(3cr)
VPRO 1110	Video Workflow.	(4cr)
VPRO 1112	Basic Camera	(3cr)

Total 13 Credits

Spring Semester

CART 1100	Adobe Photoshop	(2cr)
CART 2128	Video Editing	(3cr)
VPRO 1100	Media Scriptwriting.	(3cr)
	General Education.	(3cr)

Total 11 Credits

Second Year - Fall Semester

CART 1128	Media Production	(4cr)
CART 2114	3D Modeling.	(3cr)
VPRO 2110	Advanced Camera.	(3cr)
VPRO 2112	Advanced Video Editing	(3cr)
	General Education.	(3cr)

Total 16 Credits

Spring Semester

VPRO 2120	Interactive Design Production.	(3cr)
VPRO 2130	Creative Development	(5cr)
VPRO 2140	Business of Videography	(3cr)
VPRO 2150	Studio Productions	(3cr)

Total 14 Credits

GRADUATION REQUIREMENT 54 CREDITS

AUTOMOTIVE TECHNOLOGY



Program Information

The Automotive Technology Program at Central Lakes College offers an 11-month curriculum in automotive technology that provides students with the skills needed to pursue a career in any area of automotive repair. Our program takes great pride in its professionalism. A dress code, attendance policy, and student conduct code are strictly enforced. Because the program is so intensive, class size is limited to ensure optimum training.

Program Learning Outcomes

Graduates will be able to:

- Handle customer needs, complaints and questions about repairs/service
- Troubleshoot & diagnose vehicle operating systems
- Access and apply manufacturers' specifications in repair and replacement
- Perform vehicle operating system repairs and maintenance
- Use computerized software programs to interpret and document service
- Work independently and in teams to service, repair, test and maintain vehicles
- Work responsibly within all shop safety and environmental guidelines and standards

Admissions

The Automotive Technology Program is an

11-month program starting Fall semester.

Transfer Opportunities

Most Automotive Service Excellence (ASE) area certifications will transfer to CLC. CLC automotive technician courses transfer to many four-year schools. Consult with an advisor or counselor to learn about specific transfer opportunities.

Career Titles

Some common career titles for this field are line technician, service writer, technician instructor, sales person, and automotive parts representative. There are also opportunities for self-employment.

Employment Opportunities

Trained technicians are in huge demand nationwide and the money is very good.

Automotive Technology

Diploma Curriculum

Fall Semester - First Half

AUTM 1101	A1 Engine Repair	..... (4cr)
AUTM 1106*	A6 Electrical/Electronic System I	..... (4cr)
AUTM 1120	Work Place Skills I	..... (1cr)

Fall Semester-First Half Total 9 Credits

Fall Semester - Second Half

AUTM 1108*	A8 Engine Performance I	..... (4cr)
AUTM 1116*	A6 Electrical/ Electronics Systems II	..... (4cr)
AUTM 1121	Work Place Skills II	..... (1cr)

Fall Semester-Second Half Total 9 Credits

Spring Semester - First Half

AUTM 1102	A2 Automatic Transmission & Transaxle	..... (4cr)
AUTM 1118	A8 Engine Performance II	..... (4cr)
AUTM 1122	Work Place Skills III	..... (1cr)

Spring Semester - First Half Total 9 Credits

Spring Semester - Second Half

AUTM 1104*	A4 Steering & Suspension	..... (4cr)
AUTM 1105*	A5 Brakes	..... (4cr)
AUTM 1123	Work Place Skills IV	..... (1cr)

Spring Semester - Second Half Total 9 Credits

Summer Semester

AUTM 1103	A3 Manual Drive Train & Axles	..... (4cr)
AUTM 1107	A7 Heating & Air Conditioning	..... (4cr)

Summer Session Total 8 Credits

GRADUATION REQUIREMENT 44 CREDITS

*High School Certifiable Courses

DIESEL & HEAVY EQUIPMENT TECHNOLOGY



Career Description

Two program options allow students to prepare for careers in maintenance, repair, and diagnostics of diesel equipment. This program concentrates on the hydraulic/hydrostatic, power train, electrical/electronics, and engine systems of off-road construction equipment such as crawlers, excavators, backhoes, front end loaders, motor graders, and skid steer loaders.

Program Information

There are two program options. The Diesel and Heavy Equipment Technician Diploma is an eleven-month program consisting of a Fall and Spring semester plus an accelerated six-week summer session. The Diesel and Heavy Equipment Technology Associate of Applied Science (A.A.S.) Degree consists of all coursework from the Technician Diploma program plus and an additional 20 elective credits. A minimum of 16 of the elective credits must be General Education courses from at least three of the goal areas of the Minnesota Transfer Curriculum (MnTC).

Program Learning Outcomes

Graduates will be able to:

- Apply safe shop and equipment practices
- Demonstrate proper use and care of shop and personal tools
- Inspect, diagnose, and conduct failure analysis and perform preventative maintenance inspections in electrical, hydraulic, engines and power train systems
- Use service resources and software technologies
- Apply fundamental skills and concepts to problem solving situations
- Communicate effectively in written and speaking in diesel mechanics industry situations
- Demonstrate a high level of craftsmanship and professionalism

Special Program Requirements

Students enrolled in these programs must supply their own basic tool sets. A guideline of what tools are needed is available from admissions. A pre-enrollment drug test is required of all students. Enrolled students will remain in a random drug testing consortium.

Employment Opportunities

Graduating students find employment at original equipment manufacturing dealerships, construction contractors, independent repair facilities, federal, state and local government agencies, and the related forestry industry.

DIESEL & HEAVY EQUIPMENT TECHNOLOGY

Diesel & Heavy Equipment Technology A.A.S. Curriculum

Fall Semester

DHET 1103	Intro to Construction Equipment ... (1cr)
OR	
HEOM 1200	Intro to Operations (1cr)
MATH 1500	Applied Math (3cr)

The following classes are offered in the fall & the spring:

DHET 1125	Hydraulic Theory (3cr)
DHET 1126	Hydraulic Lab (5cr)
DHET 1128	Power Trains Theory (2cr)
DHET 1129	Power Trains Lab (5cr)

Total 19 Credits

Spring Semester

DHET 1123	Customer Service/ Service Management (2cr)
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The following classes are offered in the fall & the spring:

DHET 1107	Electrical Theory (3cr)
DHET 1108	Electrical Lab (5cr)
DHET 1117	Engine Theory (3cr)
DHET 1118	Engine Lab (5cr)

Total 18 Credits

Summer Session

DHET 1132*	On Highway Vehicle Systems Theory (3cr)
DHET 1133*	On Highway Vehicle Systems Lab (4cr)

Total 7 Credits

Student must complete the requirement listed in the A.A.S. Degree/General Education Transfer Curriculum document

Additional Credits: (20cr)

GRADUATION REQUIREMENT 64 credits

*Denotes Prerequisites

To receive the A.A.S. Degree the student must complete the Diesel and Heavy Equipment Technician Diploma Program. Plus have a minimum of 16 general education credits and 4 elective technical credits or 20 General Education credits and no additional technical credits for a total of 64 credits. These credits can be transferred in from another accredited college.

Diesel & Heavy Equipment Technology

Diploma Curriculum

Fall Semester

DHET 1103	Intro to Construction Equipment ... (1cr)
OR	
HEOM 1200	Intro to Operations (1cr)
MATH 1500	Applied Math (3cr)

The following classes are offered in the fall & the spring:

DHET 1125	Hydraulic Theory (3cr)
DHET 1126	Hydraulic Lab (5cr)
DHET 1128	Power Trains Theory (2cr)
DHET 1129	Power Trains Lab (5cr)

Total 19 Credits

Spring Semester

DHET 1123	Customer Service/ Service Management (2cr)
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The following classes are offered in the fall & the spring:

DHET 1107	Electrical Theory (3cr)
DHET 1108	Electrical Lab (5cr)
DHET 1117	Engine Theory (3cr)
DHET 1118	Engine Lab (5cr)

Total 18 Credits

Summer Session

DHET 1132*	On Highway Vehicle Systems Theory (3cr)
DHET 1133*	On Highway Vehicle Systems Lab (4cr)

Total 7 Credits

GRADUATION REQUIREMENT 44 CREDITS

*Denotes Prerequisites

HEAVY EQUIPMENT OPERATIONS & MAINTENANCE



Career Description

Heavy equipment operators are employed in many areas of the construction industry, some of which include both state and local government work, landscaping, road construction, logging, mining, underground utilities and housing developments. Graduates can expect above average earning potential when they are employed in the grading and excavating industry. The ability to operate various types of heavy equipment makes for a versatile employee which is essential to the construction industry. Knowledge of the maintenance of heavy equipment is critical in maintaining daily construction operations. Positions can be found in rural and metropolitan areas with both large and small companies nationwide. Today's construction includes updated equipment with joystick controls and the use of a global positioning system (GPS). Opportunities are available to progress in the industry to lead operator positions, site supervision or operating your own business. Contractors in all areas of the construction industry need trained employees to be successful.

Program Information

The Heavy Equipment Operation and Maintenance Program at Central Lakes College, Staples Campus is a unique program offered in Minnesota. The 64-credit program

includes courses in both maintenance and operation of heavy construction equipment. Incorporated into the program is the opportunity to “fast track,” which includes attending summer session and completing the program with a fourth semester internship in industry.

In the well-equipped West Campus maintenance shop students learn the skills necessary to service and maintain a fleet of heavy equipment. After completion of the maintenance courses, students are given real life projects in the operations field experiencing hands on training on dozers, scrapers, graders, backhoes, wheel loaders, excavators, skid steers and trucks. An opportunity to improve student skills is available on various simulators including truck driving, excavator, motor grader and wheel loader. Curriculum includes courses in construction survey, blueprint reading, and soils and compaction. Experienced faculty share their knowledge and experience from industry with the next generation of heavy equipment operators. Training takes place at the 360-acre Staples West Campus operations training site with ample space for students to experience hands-on equipment operating. Additional areas are available for special operations such as excavating in water and muck, rock work and clearing and grubbing. The West Campus includes an up-to-date classroom facility and recently completed nine-bay maintenance shop with overhead cranes, welding bay and dedicated wash bays. The classroom facility includes a soils lab where students are instructed in various types of soil identification and testing.

The Heavy Equipment Operation and Maintenance Program encourages the development of teamwork and interpersonal communication skills required in the workforce. The program also stresses the importance of safety, a strong work ethic and the value of continuing education and lifelong learning. The Heavy Equipment Operation and Maintenance Program enables students to stay on top of technological advances in construction equipment, such as GPS, and other issues

HEAVY EQUIPMENT OPERATIONS & MAINTENANCE

related to the industry's needs. We are mindful of the needs of the industry, and strive to educate students to maintain the highest standards of quality and integrity to enhance economic growth in communities. Contractors seek competent people to fill the seats of the retiring generation to uphold a competitive business.

Program Learning Outcomes

Graduates will be able to:

- Perform basic operations of earthmoving equipment related to grading and excavation needs
- Perform basic heavy equipment maintenance and repairs
- Demonstrate written and verbal comprehension of basic surveying techniques related to grades, elevations and blueprint reading
- Identify and practice safe work habits as required by OSHA and industry standards
- Obtain a current OSHA 10 hour Safety Card
- Maintain a Class A Commercial Driver's License
- Maintain a Red Cross CPR/First Aid Certification
- Demonstrate knowledge of the terms and responsibilities of a "competent person" as it pertains to OSHA, Subpart P

Special Program Requirements

Students entering the program will need a current CDL permit and are required to participate in mandatory drug testing. Students in the program must maintain a current driver's license while attending. Random drug and alcohol screening of students in the program will be done throughout the year.

Admissions

The Heavy Equipment Operation and Maintenance Program is offered as a full-time day program. New students are accepted into the program in August, December, February and June.

Career Titles

Some common career titles of this field are

heavy equipment operator, pipeline or crane oiler, snowplow operator, and haul truck driver.

Employment Opportunities

With virtually 100% placement and above-average earning potential, graduates are employed in the grading and excavating industry. Job opportunities are available in all areas of the construction industry as well as mining and logging and also with state and local governments. Many former graduates of the program have become supervisors and some have started their own construction companies.

Heavy Equipment Operations & Maintenance

Diploma Curriculum

First Year - Fall Semester

COMP 1101	Computer Fundamentals	(3cr)
HEOM 1101	Construction Safety & First Aid	(1cr)
HEOM 1102	Mechanical Theory	(1cr)
HEOM 1107	Tools, Fasteners, Shop Practices	(1cr)
HEOM 1108	Heavy Equipment Math/ Estimating	(2cr)
HEOM 1165*	Commercial Drivers License	(3cr)
HEOM 1200	Intro to Operations	(1cr)
HEOM 1211	Servicing I	(3cr)

Total 15 Credits

Spring Semester

HEOM 1110*	Preventative Maintenance	(5cr)
HEOM 1151	Heavy Equipment Welding	(1cr)
HEOM 1212*	Servicing II	(2cr)
HEOM 2102*	Construction Survey/Blueprints	(5cr)
HEOM 2150	Competent Person	(2cr)

Total 15 Credits

Second Year - Fall Semester

CCST 1530	Employment Strategies	(3cr)
HEOM 2103*	Soils and Compaction	(4cr)
HEOM 2134*	Operations Theory	(1cr)
HEOM 2135*	Construction Theory	(1cr)
HEOM 2136*	Grading Lab I	(5cr)
HEOM 2138*	Grading Lab II	(4cr)

Total 18 Credits

Spring Semester

HEOM 1261*	General Lab	(5cr)
HEOM 2110*	Backhoe/Excavation Theory	(1cr)
HEOM 2111*	Loader Theory	(1cr)
HEOM 2140*	Excavation Lab I	(3cr)
HEOM 2141*	Excavation Lab II	(3cr)
HEOM 2142*	Excavation Lab III	(3cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

MARINE & SMALL ENGINE TECHNOLOGY



Career Description

Graduates of this program typically become employed at dealerships as service technicians. The most common types of dealerships include outdoor power equipment, snowmobile, marine, motorcycle, and all-terrain vehicle (ATV).

Program Information

Courses in the Marine and Small Engine Technology Program are designed to provide the students with the knowledge and skills needed for the rapidly growing recreational and power equipment fields. All aspects of maintenance and repair are taught, which include machine overhauls, shop operation, set up, and delivery. The Marine and Small Engine Technology Diploma is a two-year program. The Marine and Small Engine Technology Associates of Applied Science (A.A.S.) Degree is two years plus one semester.

Program Learning Outcomes

Graduates will be able to:

- Apply safe work practices in a manner compatible with OSHA requirements and industry expectations
- Demonstrate industry standard applications of selected tools and equipment for small engine maintenance, diagnostic and repair

- Apply basic diagnostic and repair concepts to small engines, marine engines, power equipment, drivetrain and chassis systems
- Apply preventative maintenance concepts to small engine equipment care and storage
- Identify the functional relationships among small engine components and systems
- Use a variety of computer, Web & technical resources to find information, troubleshoot problems and prepare estimates

Special Program Requirements

In addition to the core courses of the program, students are required to fulfill 6 credits of general education. The students are encouraged to take Computer Fundamentals (COMP 1101) to fulfill 3 of those credits. The other 3 credits come from the required Applied Mathematics (MATH 1500). Because the courses are sequenced, they must be taken in order.

Transfer Opportunities

The Marine and Small Engine Technology Program has an articulation agreement with Bemidji State University for transfer to their Industrial Technology Program.

Career Titles

After completing this program, students will be prepared for a variety of careers, including service technician, general manager, service manager, individual business owner, parts personnel, factory service representative, and parts manager.

Employment Opportunities

Many former graduates have advanced to positions as service managers, general managers, and factory service representatives.

MARINE & SMALL ENGINE TECHNOLOGY

Marine & Small Engine Technology A.A.S. Curriculum

First Year - Fall Semester

MASE 1101	Basic Engines I.....	(3cr)
MASE 1103*	Basic Engines I Lab.....	(4cr)
MASE 1120	Lawn & Garden	(2c)
MASE 1140	Snowmobile Systems & Lab	(4cr)
	General Education.....	(3cr)

Total 16 Credits

Spring Semester

MASE 1106	Intro to Electronics	(2cr)
MASE 1130	Marine Outboard I.....	(4cr)
MASE 1132*	Marine Outboard II	(4cr)
MASE 1134	Marine Lower Unit.....	(4cr)
	General Education.....	(2cr)

Total 16 Credits

Second Year - Fall Semester

MASE 2133*	Advance Marine.....	(3cr)
MASE 2134*	Advance Marine & Personal Water	(3cr)
MASE 2135*	Machine Shop	(2cr)
WELD 1100	Intro to Welding	(2cr)
	General Education.....	(6cr)

Total 16 Credits

Spring Semester

MASE 2143*	Diagnostic Troubleshooting.....	(3cr)
MASE 2162*	ATV Motorcycle Systems I.....	(4cr)
MASE 2164*	ATV Motorcycle Systems II	(4cr)
	General Education.....	(4cr)

Total 15 Credits

Third Year - Fall Semester

	General Education.....	(3cr)
	Electives	(6cr)

Total 9 Credits

GRADUATION REQUIREMENT 72 CREDITS

*Denotes Prerequisites

Marine & Small Engine Technology Diploma Curriculum

First Year - Fall Semester

MASE 1101	Basic Engines I.....	(3cr)
MASE 1103	Basic Engines I Lab.....	(4cr)
MASE 1120	Lawn & Garden	(2cr)
MASE 1140	Snowmobile Systems & Lab	(4cr)
MATH 1500	Applied Mathematics	(3cr)

Total 16 Credits

Spring Semester

MASE 1130	Marine Outboard I.....	(4cr)
MASE 1132	Marine Outboard II	(4cr)
MASE 1134	Marine Lower Unit.....	(4cr)
WELD 1140	Trade Knowledge	(2cr)
MASE 1106	Intro to Electronics	(2cr)

Total 16 Credits

Second Year - Fall Semester

MASE 2133	Advance Marine.....	(3cr)
MASE 2134	Advance Marine & Personal Water	(3cr)
MASE 2135	Machine Shop	(2cr)
MASE 2169	MASE Tune Up.....	(3cr)
WELD 1100	Intro to Welding	(2cr)
	General Education/Electives.....	(3cr)

Total 16 Credits

Spring Semester

MASE 2143	Diagnostic Troubleshooting.....	(3cr)
MASE 2162	ATV Motorcycle Systems I.....	(4cr)
MASE 2164	ATV Motorcycle Systems II	(4cr)
	General Education/Electives.....	(5cr)

Total 16 Credits

GRADUATION REQUIREMENT 64 CREDITS

*Denotes Prerequisites

EMERGING DIGITAL TECHNOLOGIES

Career Description

The Emerging Digital Technologies Certificate will help students package their learning in a way that demonstrates their knowledge and skills in various digital media areas. Through this program, students gain skills in managing and creating digital media content, assessing and using web applications for business purposes, conducting webinar meetings, utilizing social networking for business purposes, capturing digital photos, posting and managing digital video and more. In this highly digitalized world, the Emerging Digital Technologies Certificate will help students in a personal sense, as well as provide a valuable component to their technical or liberal arts degree.

Program Information

The Emerging Digital Technologies Certificate prepares students to understand, navigate, and use the ever-expanding world of emerging digital media. Courses will mix cutting-edge technology with core communications and liberal arts concepts so that students will not only be able to manage the basic technology, but will be able to use it to effectively to work with others on a personal or professional level.

Program Learning Outcomes

Graduate will be able to:

- Use multiple emerging technology applications in a basic way for either personal or possible professional use.
- Demonstrate proficiencies in various technologies by completing project-based assessments

Admissions

Students can start the certificate any semester. Specific program admission is not required

Transfer Opportunities

Most courses within the program may be used as elective credits toward an Associate of Arts degree and many will also meet goal areas within the MN Transfer Curriculum

Employment Opportunities

This certificate is designed to integrate into or be added onto another degree program. Students with the Emerging Digital Technologies Certificate will find themselves more valuable to perspective employers across a wide-range of employment areas.

Emerging Digital Technologies Certificate Curriculum

Required Courses

COMP 1140	Survey of Web-Based Tools	(3cr)
OR		
COMP 1305	Exploring Digital World Technologies	(3cr)

(Note: Students should satisfactorily complete a computer literacy assessment prior to enrolling or complete the recommended prerequisite of COMP 1109)

Select 13 credits from at least 2 different disciplines:

COMP 1120	Introduction to Computer Applications	(3cr)
COMP 1121*	Advanced Computer Applications	(3cr)
COMP 1138	iPad Technologies	(3cr)
COMP 1140	Survey of Web-Based Tools	(3cr)
COMP 1305	Exploring Digital World Technologies	(3cr)
COMP 2127*	Hardware/Software Evaluation	(2cr)
ARTS 1420	Digital Photography	(3cr)
ETEC 1120	Immersive Worlds, Second Lives and Avatars	(2cr)
PHIL 1420	Cyber Ethics	(2cr)
SPCH 1472	Online Social Networking	(3cr)
THTR 1430	You Tube is a Stage.	(3cr)

Total 16 Credits

GRADUATION REQUIREMENT 16 CREDITS

*Denotes Prerequisite or Co-requisite

ENOLOGY



Career Description

Enologists oversee the production of wine. They inspect grapes and evaluate the crops to determine when to harvest and start wine production. They ensure proper crushing methods and techniques. Responsibilities depend on the size of the winery. The enologist is heavily involved in quality control. One may work with a laboratory technician if employed by a larger winery. Another may develop new wines or specialize in a specific wine in a larger winery.

Program Information

The program provides the knowledge required to produce wines of the highest quality. Students learn the science, agriculture, and business skills necessary to enhance Minnesota's rapidly growing wine industry. Included is a foundation in chemistry and biology along with specific courses related to cultivar selection, soil preparation, cellar maintenance and marketing. The program is specifically designed to include fieldwork and laboratory practicums at local wineries.

Program Learning Outcomes

Graduates will be able to:

- Examine grape samples to ascertain sweetness and acidity of crop, and determine harvest time based off of this information

- Select yeasts for fermentation and barrels for aging
- Communicate with vineyard manager regarding crop load, harvest time, and other issues related to crop quality
- Correct sugar and acid levels of must and wine if necessary
- Oversee primary fermentation by punching down the grape skin cap, regulating fermentation temperature and the amount of time the skins are in contact with the must, and initiating malolactic fermentation
- Supervise workers in crushing and pressing processes, or perform those duties themselves
- Supervise cellar operations during secondary fermentation with tasks such as aging, topping off barrels, and clearing wine of fermentation residue
- Direct and coordinate blending and bottling of wine, or perform those duties themselves

Transfer Opportunities

Viticulture and Enology Science and Technology Alliance (VESTA) is a consortium of colleges, including Central Lakes College, Northeast Iowa Community College, Missouri State University, Rend Lake (Ill.) Community College, and Redlands (Okla.) Community College.

Career Titles

Winemaker, winemaking director, assistant winemaker, cellar master, cellar worker 2, enologist, lab technician, lab manager, tasting room manager.

Employment Opportunities

Job opportunities in enology are tied to trends in the wine industry. Growing grapes in Minnesota is becoming increasingly popular. In 1975, Minnesota had two wineries. By 2007 there were 26. The Minnesota Department of Agriculture reports an increase in both the number of farms growing grapes and total acreage. Employment opportunities are available locally, regionally and nationwide.

ENOLOGY

Enology A.A.S. Curriculum

First Year - Fall Semester

COMP 1101	Computer Fundamentals.....	(3cr)
BIOL 1431	General Biology I.....	(5cr)
MATH 1506	Beginning College Algebra.....	(4cr)
VITI 1146	Introduction to Enology.....	(3cr)

Total 15 Credits

Spring Semester

CHEM 1414	Fundamentals of Chemistry.....	(4cr)
SPCH 1431	Fundamentals of Public Speaking .	(3cr)
VITI 1148*	Winery Sanitation.....	(3cr)
VITI 1160*	Winery Equipment Operation.....	(2cr)
VITI 1210	Introduction to Wine Microorganisms.....	(3cr)

Total 15 Credits

Second Year - Fall Semester

BIOL 2457*	Microbiology.....	(4cr)
ENGL 1410	Composition I.....	(4cr)
POLS 1435	American Government & Politics..	(3cr)
VITI 1246*	Intermediate Enology.....	(3cr)

Total 14 Credits

Spring Semester

BUSN 1166	Business Communication.....	(3cr)
VITI 1259*	Cellar Operations Technology.....	(2cr)
VITI 1266*	Sensory Evaluation.....	(3cr)
VITI 1268*	Wine and Must Analysis.....	(3cr)
	Elective.....	(2cr)

Total 13 Credits

Third Year - Fall Semester

VITI 1257*	Fall Wine Production Internship... (3cr)
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Total 3 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Enology Diploma Curriculum

First Year - Fall Semester

CHEM 1414	Fundamentals of Chemistry.....	(4cr)
VITI 1146	Introduction to Enology.....	(3cr)
VITI 1210	Introduction to Wine Microorganisms.....	(3cr)
	Elective.....	(2cr)

Total 12 Credits

Spring Semester

VITI 1148*	Winery Sanitation.....	(3cr)
VITI 1160*	Winery Equipment Operation.....	(2cr)
VITI 1246*	Intermediate Enology.....	(3cr)
VITI 1259*	Cellar Operations Technology.....	(2cr)
VITI 1266*	Sensory Evaluation.....	(3cr)
VITI 1268*	Wine and Must Analysis.....	(3cr)

Total 16 Credits

Second Year - Fall Semester

VITI 1257*	Fall Wine Production Internship... (3cr)
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Total 3 Credits

GRADUATION REQUIREMENT 31 CREDITS

FARM BUSINESS MANAGEMENT

Program Information

The primary emphasis of the Farm Business Management Program is to assist farm families in meeting their business and personal goals through quality farm records and sound business decisions. This program is primarily taught at the student's place of business, but classroom and group instruction are also very important. Individualized instruction is used to the fullest extent. Students are enrolled in the program on a continuous, part-time basis. Normal credit load is 10 credits per year, for the equivalent of 1/3 of a full-time college student. The instructor visits the farm on a regular basis and understands the strengths and weaknesses of each student's business.

Developing a set of sound farm records is the basis for the program. Primarily, computerized accounting is used to handle the complex records, which must be kept in an efficient farm business. At the close of the calendar year, these records are summarized by the instructor and a computerized business analysis is prepared for each student to show how well his/her business did financially during the year. Each student also receives an area Farm Business Analysis Summary, which allows them to compare their information with averages of other Farm Business Management students (farmers) in their local area and around the state.

The Farm Business Management Program offering consists of four certificate programs. The first three certificate programs are 30 credits in length. These three programs include Essentials of Farm Business Management, Applications in Farm Business Management, and Advanced Farm Business Management. The fourth certificate option is the Marketing Certificate, consisting of 25 credits.

Program Learning Outcomes

Upon program completion students will be able to:

- Maintain accurate records regularly.
- Complete business analysis annually.
- Complete accurate balance sheets annually

or as needed.

- Complete business planning annually and strategically.
- Continue in business after completing award area(s).

Special Program Requirements

The Farm Business Management Program is designed for business owners, managers, and key employees of farm and agricultural business. In addition, individuals in the process of starting a farm or agricultural business may also enroll.

Admissions

The Farm Business Management Program is primarily offered as individualized instruction at the business. Classroom instruction is also offered on a limited basis. Normal credit load is 10 credits per year, for the equivalent of 1/3 of a full-time college student.

Employment Opportunities

Students in this program are currently employed in the field, or in the process of starting a business.

Advanced Farm Business Management Certificate Curriculum

Required Courses

FBMA 3100*	Fund of Financial Mgmt Relates Risk Mgmt.	(3cr)
FBMA 3101*	Applied Financial Mgmt. Relates Risk Mgmt.	(3cr)
FBMA 3110*	Fund Finan Mgmt/Strategic Plan Emphasis	(3cr)
FBMA 3111*	Applied Financial Mgmt/ Strategic Plan Emp.	(3cr)
FBMA 3120*	Fund Financial Mgmt/ Bus Plan Emphasis	(3cr)
FBMA 3121*	Applied Financial Mgmt/ Bus Plan Emphasis	(3cr)

Total 18 Credits

Electives

Student must choose additional 12 credits from the Farm Business Management Master Course Listing. Electives can be identified when the second numerical placeholder is a "3". (i.e. FBMA 3330)

Total 12 Credits

GRADUATION REQUIREMENT 30 CREDITS

FARM BUSINESS MANAGEMENT

Agricultural Commodities Marketing Certificate Curriculum

Required Courses

FBMT 1170	Introduction to Farm Commodities Mktg	(3cr)
FBMT 1173	Directed Study - Introduction to Farm Commodity Marketing	(2cr)
FBMT 1180	Applying Commodity Mktg Fundamentals	(3cr)
FBMT 1183	Directed Study - Applying Commodity Marketing Fundamentals	(2cr)
FBMT 1190	Evaluating Farm Commodity Mktg Tools	(3cr)
FBMT 1193	Directed Study - Evaluating Farm Commodity Marketing Tools	(2cr)
FBMT 2170	Monitoring Farm Commodity Mktg Plans	(3cr)
FBMT 2173	Directed Study - Monitoring Farm Commodity Marketing Plans	(2cr)
FBMT 2180	Strategies in Farm Commodity Marketing	(3cr)
FBMT 2183	Directed Study- Strategies in Farm Commodity Marketing	(2cr)

Total 25 Credits

GRADUATION REQUIREMENT 25 CREDITS

Applications in Farm Business Management Certificate Curriculum

Required Courses

FBMT 2141	Interpreting and Evaluating Financial Data	(4cr)
FBMT 2142	Interpreting Trends in Business Planning	(4cr)
FBMT 2151	Strategies in Farm System Data Management	(4cr)
FBMT 2152	Integrating System Information for Financial Planning	(4cr)
FBMT 2161	Examination of the Context of Farm System Management	(4cr)
FBMT 2162	Refining Farm System Management	(4cr)

Total 24 Credits

Electives

Student must choose an additional 6 credits from the Farm Business Management Master Course Listing. Electives can be identified when the second numerical placeholder is a "2". (i.e. FBMT 1211)

Total 6 Credits

GRADUATION REQUIREMENT 30 CREDITS

Current Issues in Farm Business Management Certificate Curriculum

Required Courses

FBMA 2210	Current Issues in Farm Business Management	(1-5cr)
FBMA 2220	Directed Studies - Current Issues in Farm Bus Mgmt	(1-5cr)
FBMA 2211	Current Issues in Farm Business Management	(1-5cr)
FBMA 2221	Directed Studies - Current Issues in Farm Bus Mgmt	(1-5cr)
FBMA 2212	Current Issues in Farm Business Management	(1-5cr)
FBMA 2222	Directed Studies - Current Issues in Farm Bus Mgmt	(1-5cr)

Total 18-30 Credits

Electives

Student must choose up to an additional 12 credits from the Farm Business Management Master Course Listing. Electives can be identified when the second numerical placeholder is a "2". (i.e. FBMA 2223)

Total 0-12 Credits

GRADUATION REQUIREMENT 30 CREDITS

Essentials of Farm Business Management Certificate Curriculum

Required Courses

FBMT 1112	Foundations for Farm Business Management	(4cr)
FBMT 1121	Preparation for Farm Business Analysis	(4cr)
FBMT 1122	Implementing the System Management Plan	(4cr)
FBMT 1131	Managing and Modifying Farm System Data	(4cr)
FBMT 1132	Interpreting and Using Farm System Data	(4cr)

Total 20 Credits

Electives

Student must choose an additional 10 credits from the Farm Business Management Master Course Listing. Electives can be identified when the second numerical placeholder is a "2". (i.e. FBMT 1211)

Total 10 Credits

GRADUATION REQUIREMENT 30 CREDITS

OCCUPATIONAL SKILLS

Career Description

The Occupational Skills Program (OSP) is a technical college program that offers work-based training and classroom instruction for persons with disabilities with the outcome of competitive entry-level employment. Students in OSP actively participate in opportunities in the workplace and the classroom to expand their work experience background and increase their employability in the entry-level skilled work market. Experiences in OSP also promote social, physical and emotional growth in the college setting.

Program Information

OSP is a nine-month diploma program, staffed by one coordinator/instructor and two laboratory assistants. Specific skills needed for employment are taught at the business, college or community where students receive training. Coursework in the classroom reinforces basic work skills learned at the employment site, which increases student success at any workplace. Other skill outcomes for students in OSP taught in the classroom include communication skills (verbal, nonverbal and written,) problem-solving skills (goal-setting, self advocacy and relationship building, etc.) and decision-making skills (i.e. citizenship skills, budgeting, self management.) Students can also participate in an elective summer internship course which provides follow-up services at their place of employment following graduation.

Program Learning Outcomes

Graduates will be able to:

- Communicate with supervisors and peers
- Maintain employment in supervised settings
- Follow specified procedures and time lines
- Exhibit self-advocacy skills in personal and work settings
- Set appropriate short term and long term goals

Special Program Requirements

Students in OSP have documented disabilities and the ability to compete for entry-level job positions in the community in which they

reside. All after-school services required for independent living are secured by the student and family before the onset of Fall semester. Students can apply for OSP in the fall, beginning on Sept. 1, the year preceding attendance in the program. Student interviews for applicants meeting program criteria begin in January. Interviews and acceptance of students are completed from January to April with new students attending OSP orientation in late spring.

Career Titles

Common job titles for graduates include stock person, line worker, housekeeping, waitress, ride operator, dishwasher and dietary aide.

Employment Opportunities

According to the MN Department of Employment and Economic Development, entry-level career availability is expected to continue to rise. Some examples of entry-level employment that students in the Occupational Skills Program obtain following graduation are food preparation, janitorial, retail, cashier and stock clerks, and entry-level health care positions. Placement data results from OSP show a great majority of students obtain gainful employment after graduation.

Occupational Skills Diploma Curriculum

Fall Semester

COMP 1103	Computer Basics I	(1cr)
OSKL 1142	Communication I	(3cr)
OSKL 1144	Critical Reasoning Skills I	(4cr)
OSKL 1148	Employability Skills I	(3cr)
OSKL 1152	Internship Skills	(1cr)
OSKL 1154	Supervised Pre-Internship I	(4cr)
OSKL 1162	Study Skills I	(1cr)

Total 17 credits

Spring Semester

COMP 1104	Computer Basics II	(1cr)
OSKL 1146	Critical Reasoning Skills II	(3cr)
OSKL 1150	Employability Skills II	(4cr)
OSKL 1156	Supervised Pre-Internship I	(4cr)
OSKL 1164	Study Skills II	(1cr)
OSKL 1166	Communication II	(3cr)
	Elective	(1cr)

Total 17 credits

GRADUATION REQUIREMENT 34 CREDITS

This is an example. Your advisor will help you select the individual courses and elective you wish to take.

VITICULTURE



Career Description

Vineyard managers oversee the growing and care of grapes. They develop a system of grape management that is appropriate for each vineyard. They decide how to manage planting, fertility, harvesting and pruning. They are heavily involved in varietal selection, site preparation, equipment maintenance and safety, first season establishment, vine growth development, trellis systems and pruning. They also are involved in pest management, soil quality and the overall impact on the environment.

Program Information

The Viticulture Technology program provides a comprehensive examination of the field of viticulture (grape growing). The program provides the knowledge required to maintain vineyards in Minnesota and the Midwest, with specific attention given to varietal selection, soil preparation, pest management and marketing, as well as the science, agriculture and business skills necessary to succeed in Minnesota's rapidly growing viticulture business. The program includes fieldwork and practicums at local vineyards.

Program Learning Outcomes

Graduates will be able to:

- Manage all part-time and seasonal vineyard workers
- Maintain records of all vineyard operation activities
- Assist wine maker in crop load management, harvest coordination and execution
- Monitor the vineyard regarding nutrient status, grape diseases, insect, fungus, weeds, and other pests
- Maintain records of all viticultural monitoring activities
- Practice IPM (Integrated Pest Management)
- Recommend and plan any large scale changes in vineyard plantings, specifically cultivars and selection of the site
- Plan and assist in irrigation scheduling and operation
- Plan and assist in general property maintenance
- Operate vineyard machinery safely

Transfer Opportunities

Viticulture and Enology Science and Technology Alliance (VESTA) is a consortium of colleges, including Central Lakes College, Northeast Iowa Community College, Missouri State University, and Rend Lake (Ill.) Community College, and Redlands (Okla.) Community College.

Career Titles

Vineyard manager, vine nursery manager, vineyard designer, vineyard developer, pest controller, crew supervisor, equipment supervisor, research viticulturist.

Employment Opportunities

Job opportunities in vineyard management are tied to trends in grape production. Growing grapes in Minnesota is becoming increasingly popular. Statistics from the Minnesota Department of Agriculture show an increase in both the number of farms growing grapes and the total acreage. Employment opportunities are available locally, regionally and nationwide.

VITICULTURE

Viticulture A.A.S. Curriculum

First Year - Fall Semester

BIOL 1431	General Biology I	(5cr)
COMP 1101	Computer Fundamentals	(3cr)
MATH 1506	Beginning College Algebra	(4cr)
VITI 1111	Introduction to Viticulture and Vineyard Establishment	(3cr)

Total 15 Credits

Spring Semester

CHEM 1414	Fundamentals of Chemistry	(4cr)
ENGL 1410	Composition I	(4cr)
SPCH 1431	Fundamentals of Public Speaking	(3cr)
VITI 1113*	Winter Viticulture Technology	(2cr)
VITI 1293	Soils for Viticulture	(3cr)

Total 16 Credits

Summer Session

VITI 1115*	Summer/Fall Viticulture Technology	(2cr)
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Total 2 Credits

Second Year - Fall Semester

BIOL 1134	General Botany	(4cr)
MATH 1460	Intro to Statistics	(4cr)
VITI 1190	Viticulture Safety	(1cr)
VITI 1211	Integrated Pest Management	(2cr)
VITI 1213*	Midwest Vineyard Management	(2cr)

Total 13 Credits

Spring Semester

AGR 157	Principles of Agriculture Mechanization	(3cr)
BUSN 116	Business Communication	(3cr)
POLS 1435	American Government and Politics	(3cr)
VITI 1114*	Spring Viticulture Technology	(2cr)
	Elective	(3cr)

Total 14 Credits

GRADUATION REQUIREMENT 60 CREDITS

*Denotes Prerequisites

Viticulture Diploma Curriculum

First year - Fall Semester

BIOL 1134	General Botany	(4cr)
VITI 1111	Introduction to Viticulture and Vineyard Establishment	(3cr)
VITI 1211	Integrated Pest Management	(2cr)
VITI 1293	Soils for Viticulture	(3cr)
VITI 1190	Viticulture Safety	(1cr)

Total 13 Credits

Spring Semester

CHEM 1414	Fundamentals of Chemistry	(4cr)
COMP 1101	Computer Fundamentals	(3cr)
VITI 1113*	Winter Viticulture Technology	(2cr)
VITI 1213*	Midwest Vineyard Management	(2cr)
VITI 1114*	Spring Viticulture Technology	(2cr)
	Elective	(3cr)

Total 16 Credits

Summer Session

VITI 1115*	Summer/Fall Viticulture Technology	(2cr)
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Total 2 Credits

GRADUATION REQUIREMENT 31 CREDITS

AUTOMATION TECHNOLOGIES

Career Description

Professionals educated in automation technologies install and maintain complicated systems performing an array of functions through electronic equipment. Such equipment is used by power companies, manufacturers, air traffic and missile controllers to name a few organizations that depend upon transmitted communication & sophisticated monitoring devices.

Program Information

This certificate provides introductory courses in production technologies and automation technologies to start students on a career pathway. Students engage in technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety. Course work also includes AC/DC power, digital electronics, analog circuits, and motor controls.

Program Learning Outcomes

Upon program completion students will be able to:

- Gain a general knowledge of production technology processes.
- Gain knowledge and understanding of interpreting production prints.
- Apply technical mathematics skills to production processes.
- Demonstrate basic computer skills.
- Gain knowledge and understanding of AC/DC power, digital electronics, analog circuits, and motor controls.
- Graduates will be able to gain knowledge and understanding of AC/DC power, digital electronics, analog circuits, and motor controls.

Transfer Opportunities

This certificate is offered collaboratively with Northland Community & Technical College, Northwest Technical College, Minneapolis Community and Technical College, Pine Technical College, Riverland Community College, St. Cloud Technical and Community College, and St. Paul College. Courses are transferable within all the listed colleges.

Career Titles

Electronics repair technician, electronic testing technician. electrical and electronic installer.

Employment Opportunities

With predicted 11 percent growth in job openings forecast to 2016, Minnesota career opportunities await the trained electrical and electronics repairer. Advanced manufacturing is identified as a high-demand, high-pay industry, with entry-level employment viewed as a path for advancing a career.

Automation Technologies Certificate Curriculum

CMAE 1502	Technical Mathematics	.....	(3cr)
CMAE 1506	Introduction to Computer Applications	.....	(2cr)
CMAE 1510	Print Reading	.....	(2cr)
CMAE 1514	MSSC Safety	.....	(2cr)
CMAE 1518	MSSC Manufacturing Processes & Production	.....	(2cr)
CMAE 1522	MSSC Quality Practice & Measurement	.....	(2cr)
CMAE 1526	MSSC Maintenance Awareness	....	(2cr)
CMAE 1550	DC Power	.....	(3cr)
CMAE 1552	AC Power	.....	(3cr)
CMAE 1554	Digital Electronics	.....	(3cr)
CMAE 1556	Analog Circuits	.....	(3cr)
CMAE 1558	Motor Controls	.....	(3cr)

Total 30 Credits

GRADUATION REQUIREMENT 30 CREDITS

MACHINE TECHNOLOGY

Career Description

Production machinists work primarily in the production of large volumes of one single part, particularly parts that require strict adherence to specs and involve many complicated operations. Machinists decide what cutting tool is used and the speed the part is made, as well as the feed rate, while the programmer is in charge of setting up the path the cut will follow.

Program Information

This certificate provides introductory courses to production and machining technology to obtain basic skills for other manufacturing career pathways. Training prepares the graduate for an entry-level machinist production position. Students engage in technical math, introductory computer skills, print interpretation, manufacturing processes, machine tool theory and lab, quality control, maintenance and safety.

Program Learning Outcomes

Upon program completion students will be able to:

- Gain a general knowledge of production technology processes.
- Gain knowledge and understanding of interpreting production prints.
- Apply technical mathematics skills to production processes.
- Demonstrate basic computer skills.
- Gain knowledge and understanding of machine tool print reading, machine tool technology theory and lab principles, machining math, an introduction to computer numerical control, and geometric dimensioning and tolerancing.

Transfer Opportunities

This certificate is offered collaboratively with Northland Community & Technical College, Northwest Technical College, Minneapolis Community and Technical College, Pine Technical College, Riverland Community College, St. Cloud Technical and Community College, and St. Paul College. Courses are transferable within all the listed colleges.

Employment Opportunities

The Minnesota Department of Employment and Economic Development long-term projections show the need for a number of replacement workers in the machinist occupation. Advanced manufacturing continues to be considered a high-demand, high-pay industry in Minnesota. The certificate program yields marketable skills and knowledge to entry-level employees.

Career Titles

Machine tool operator, tool operator, production worker, machine setter or tender.

Machine Technology

Certificate Curriculum

CMAE 1502	Technical Mathematics	(3cr)
CMAE 1506	Introduction to Computer Applications	(2cr)
CMAE 1510	Print Reading	(2cr)
CMAE 1514	MSSC Safety	(2cr)
CMAE 1518	MSSC Manufacturing Processes & Production	(2cr)
CMAE 1522	MSSC Quality Practice & Measurement	(2cr)
CMAE 1526	MSSC Maintenance Awareness	(2cr)
CMAE 1530	Machining Math	(2cr)
CMAE 1532	Machine Tool Print Reading	(2cr)
CMAE 1534	Machine Tool Technology Theory	(2cr)
CMAE 1536	Machine Tool Technology Lab I	(2cr)
CMAE 1538	Machine Tool Technology Lab II	(2cr)
CMAE 1540	Introduction to CNC	(3cr)
CMAE 1542	Geometric Dimensioning & Tolerancing	(2cr)

Total 30 Credits

GRADUATION REQUIREMENT 30 CREDITS

PRODUCTION TECHNOLOGIES

Career Description

Trained in production technologies, a team assembler is part of a team responsible for assembling entire products or components of products. The assembler performs all tasks conducted by the team in the assembly process and rotates through all or most of them rather than being assigned a specific task on a permanent basis. As a team leader one may participate in making management decisions affecting the work.

Program Information

Courses give an introduction to production technologies and provide initial information to start students in a manufacturing career pathway. Students engage in technical math, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance and safety.

Program Learning Outcomes

Upon program completion students will be able to:

- Gain a general knowledge of production technology processes.
- Gain knowledge and understanding of interpreting production prints.
- Apply technical mathematics skills to production processes.
- Demonstrate basic computer skills.

Transfer Opportunities

This certificate is offered collaboratively with Northland Community & Technical College, Northwest Technical College, Minneapolis Community and Technical College, Pine Technical College, Riverland Community College, St. Cloud Technical and Community College, and St. Paul College. Courses are transferable within all the listed colleges.

Employment Opportunities

The Minnesota Department of Employment and Economic Development long-term projections show a 2 percent increase in workers in the team assembler occupation. Team assembler would be the appropriate occupation for individuals with this certificate. Advanced manufacturing continues to be considered a

high demand/high pay industry for the State of Minnesota and this certificate provides marketable skills and knowledge to entry-level employees and a provides a pathway for advancing a career.

Career Titles

Assembly line machine operator, manufacturing assembler, team assembler, assembly technician, assembly operator.

Production Technologies

Certificate Curriculum

CMAE 1502	Technical Mathematics	(3cr)
CMAE 1506	Introduction to Computer Applications	(2cr)
CMAE 1510	Print Reading	(2cr)
CMAE 1514	MSSC Safety	(2cr)
CMAE 1518	MSSC Manufacturing Processes & Production	(2cr)
CMAE 1522	MSSC Quality Practice & Measurement	(2cr)
CMAE 1526	MSSC Maintenance Awareness	(2cr)

Total 15 Credits

GRADUATION REQUIREMENT 15 CREDITS

WELDING TECHNOLOGY

Career Description

Skilled welding, soldering, and brazing workers generally plan work from drawings or specifications or use their knowledge of fluxes and base metals to analyze the parts to be joined. These workers then select and set up welding equipment, execute the planned welds, and examine welds to ensure that they meet standards or specifications. Some welders have limited duties and perform routine jobs that have been planned and laid out. Highly skilled welders work with a wide variety of materials in addition to steel, such as titanium, aluminum, or plastics.

Program Information

Introductory courses survey production technologies and welding fundamentals. Students use technical mathematics, computer skills, and hands-on experiences with specific welding processes. They learn welding print reading and symbol interpretation, manufacturing processes, quality control, metallurgy, maintenance, and safety.

Program Learning Outcomes

Upon program completion students will be able to:

- Gain a general knowledge of production technology processes.
- Gain knowledge and understanding of interpreting production prints.
- Apply technical mathematics skills to production processes.
- Demonstrate basic computer skills.

Gain knowledge and understanding and skills related to welding print reading and interpreting symbols, following welding procedures, safety, metallurgy and mechanical properties of materials, and hands on experience with specific welding processes including oxyacetylene cutting and welding, shielded metal arc welding, gas metal arc welding, flux core arc welding, and gas tungsten arc welding.

Transfer Opportunities

This certificate is offered collaboratively with Northland Community & Technical College, Northwest Technical College, Minneapolis Community and Technical College, Pine Technical College, Riverland Community College, St. Cloud Technical and Community College, St. Paul College. Courses are transferable within all the listed colleges.

Employment Opportunities

Long-term projections indicate a high demand for replacement workers in welding-related occupations. Advanced manufacturing is considered a high demand, high-pay industry in Minnesota.

Welding Technology

Certificate Curriculum

CMAE 1502	Technical Mathematics	(3cr)
CMAE 1506	Introduction to Computer Applications	(2cr)
CMAE 1510	Print Reading	(2cr)
CMAE 1514	MSSC Safety	(2cr)
CMAE 1518	MSSC Manufacturing Processes & Production	(2cr)
CMAE 1522	MSSC Quality Practice & Measurement	(2cr)
CMAE 1526	MSSC Maintenance Awareness	(2cr)
CMAE 1560	Interpreting Symbols	(2cr)
CMAE 1562	Oxy Fuel	(3cr)
CMAE 1564	SMAW	(3cr)
CMAE 1566	GMAW/FCAW	(3cr)
CMAE 1568	GTAW	(3cr)
CMAE 1570	Metallurgy and Mechanical Properties of Mat.	(1cr)

Total 30 Credits

GRADUATION REQUIREMENT 30 CREDITS

Civic Engagement and Service Learning opportunities are a strategic priority at Central Lakes College

Civic Engagement creates awareness and a sense of responsibility through involvement with one's communities through a variety of volunteer activities for CLC students, faculty, and staff. Benefits may include:

- Learning from others, self, and environment to develop informed perspectives on social issues
- Valuing diversity and building relationships across differences
- Working through controversy, with civility
- Taking an active role in government processes
- Participating actively in problem solving, public life and community service
- Enhancing leadership roles in organizations
- Developing empathy, ethics, values and sense of social responsibility
- Promoting social justice locally and globally
- Giving back of individual time and talents for the greater good of the community
- Exchanging knowledge, skills, and experiences

Service Learning links academic study to community service through structured reflection; it engages students in responsible and challenging community service; it provides structured opportunities for students to reflect critically on their experiences; and it emphasizes learning in areas such as communication, critical thinking and community involvement.

Service Learning projects can be initiated by students, faculty, non-profit organizations or in some cases, a business. Faculty evaluate all potential projects for appropriateness and if they meet the learner outcomes of a particular course or program of study. Faculty supervise all projects and evaluate learner outcomes and students involvement.

For more information contact:

Rebecca Best, Dean of Workforce, Economic, and Regional Development
218-855-8143 or rbest@clcmn.edu





COURSE DESCRIPTIONS

Accounting

ACCT 2011 Accounting Principles I (Financial)

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers the fundamental accounting concepts and principles which are used to analyze and record business transactions and communicate useful financial information to decision makers. Specific topics include an emphasis on understanding the complete accounting cycle, applying generally accepted accounting principles to economic events, and preparing classified general purpose financial statements in good form. Transfer Curriculum Goal(s): none

ACCT 2012 Accounting Principles II (Managerial)

Credits: 4

Prerequisite: ACCT 2011

Co-Requisite: none

A continuation of the study of ACCT 2011 incorporating the statement of cash flows and financial statement analysis. This course introduces the fundamentals of management accounting topics including cost behavior, an overview of job order and process costing, budgeting, cost-volume-profit relationships, costing methods and variance analysis. Students will use accounting information as a planning, analysis and control tool to facilitate decision making. Transfer Curriculum Goal(s): none

ACCT 2111 Accounting Principles I Lab

Credits: 1

Prerequisite: none

Co-Requisite: ACCT 2011

This is a companion course to ACCT 2011 Accounting Principles I. Students will complete enhanced application exercises in Excel to solidify their understanding of topics from Accounting Principles I. Classes will consist of hands-on experiential learning methodologies. (Note: this course is optional for students who are pursuing an A.A. transfer degree.) Transfer Curriculum Goal(s): none

ACCT 2112 Accounting Principles II Lab

Credits: 1

Prerequisite: none

Co-Requisite: ACCT 2012

This is a companion course to ACCT 2012 Accounting Principles II. Students will complete enhanced application exercises in Excel to solidify their understanding of topics from Accounting Principles II. Classes will con-

sist of hands-on experiential learning methodologies. (Note: this course is optional for students who are pursuing an A.A. transfer degree.)

Transfer Curriculum Goal(s): none

ACCT 2114 Payroll Accounting

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed to develop an understanding of the various federal and state laws pertaining to the computation and payment of employment compensation. Topics include employment recordkeeping requirements, preparation of the payroll register, individual earnings records, tax reports and other forms required by government agencies.

Transfer Curriculum Goal(s): none

ACCT 2121 Intermediate Accounting I

Credits: 4

Prerequisite: ACCT 2012

Co-Requisite: none

This course is an in-depth study of financial accounting theories, concepts and practices. It provides a review of the accounting process, the conceptual framework of accounting and the preparation of classified general purpose financial statements in good form. Students will understand, prepare and use financial information by linking accounting education with the real-world accounting environment and training to enter the workforce, using The GPS LifePlan website to create resumes and electronic portfolios. Transfer Curriculum Goal(s): none

ACCT 2123 Intermediate Accounting II

Credits: 4

Prerequisite: ACCT 2121

Co-Requisite: none

This course is a continuation of the comprehensive study of financial accounting theory, concepts and practices, with particular emphasis on long-term liabilities, stockholder's equity, earnings per share, income taxes, pensions, leases, and the statement of cash flows. Additional related topics will also be presented.

Transfer Curriculum Goal(s): none

ACCT 2138 Computerized Accounting Software

Credits: 4

Prerequisite: ACCT 2011

Co-Requisite: none

This course is an introduction to computerized accounting applications using Peachtree and QuickBooks Pro software. The focus is on providing

the student with the conceptual knowledge and hands-on experience necessary to build the problem-solving skills that he or she will need when using computerized accounting in the workplace. Topics include analyzing transactions, performing accounting activities, and producing financial statements.

Transfer Curriculum Goal(s): none

ACCT 2140 Accounting Information Systems

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will learn to use spreadsheet and database management software to design and build accounting information systems that delivers timely, accurate information for solving real accounting and business problems. This course is designed to reinforce the concepts students learn in their accounting courses and to show how worksheets and databases can help users make better and more informed business decisions.

Transfer Curriculum Goal(s): none

ACCT 2161 Cost Accounting I

Credits: 3

Prerequisite: ACCT 2012

Co-Requisite: none

This course provides theoretical and practical knowledge of the fundamentals of a cost accounting information system, including cost behavior, cost-volume-profit relationships, costing techniques in service and manufacturing sectors, budgeting, variance analysis and the creation of pro-forma financial statements to evaluate a company's performance. Management use cost accounting information for decision making.

Transfer Curriculum Goal(s): none

ACCT 2165 Income Tax

Credits: 4

Prerequisite: ACCT 2011

Co-Requisite: none

This course is an introductory course in the study of U.S. taxation policy, the application of that policy to calculate the correct tax position, and to prepare a Federal Form 1040 and accompanying schedules along with a MN income tax return in good form for various taxpayers.

Transfer Curriculum Goal(s): none

ACCT 2170 Tax Updates with Tax Software

Credits: 1

Prerequisite: ACCT 2165

Co-Requisite: none

Students will demonstrate an un-

derstanding of the most current tax laws and prepare individual income tax returns using TaxWise Software. Students will be expected to achieve IRS certification at the advanced level using interactive training modules and volunteer to prepare individual tax returns at VITA Sites of their choosing within a 60-mile radius of Central Lakes College- Brainerd campus. Transfer Curriculum Goal(s): none

ACCT 2350 Accounting Internship Credits: 1-9

Prerequisite: instructor's consent
Co-Requisite: none

The accounting internship is designed to provide the student with a purposeful occupational experience. Since each internship is an individualized experience, a training plan is specifically created for each student in conjunction with the training site to which the student is assigned. Transfer Curriculum Goal(s): none

ACCT 2370 Special Problems in Accounting Credits: 1-3

Prerequisite: instructor's consent
Co-Requisite: none

This course allows accounting students to study accounting types of problems relevant for their own career objectives. Students will meet with their instructor to set up their own course of study, and may satisfy course requirements through industry seminars, outside training experiences or individual research. Transfer Curriculum Goal(s): none

Administrative Assistant

ADMN 1120 Administrative Support Applications Credits: 3

Prerequisite: COMP 1109, COMP 1131, COMP 1135

Co-Requisite: COMP 1133, COMP 1134
This course teaches students to develop skill in performing typical office tasks including electronic and manual file management, mailable document processing, classifying of mail, meeting and event planning, travel arrangements, managing office supplies as well as email and other electronic communication system management. Students will also develop skill in telephone and calendaring procedures through projects and simulations as well as on-line and library and/or internet reference assignments. Emphasis will be on setting priorities and practicing time management skills. Transfer Curriculum Goal(s): none

ADMN 1125 Business English Skills Credits: 3

Prerequisite: COMP 1109
Co-Requisite: none

This course is an extensive, comprehensive study of Business English grammar, spelling, word usage, punctuation, number usage, capitalization and abbreviation rules, and proofreading. Students will develop the technical skills utilizing business/industry standards. Transfer Curriculum Goal(s): none

ADMN 2110 Administrative Assistant Capstone Credits: 3

Prerequisite: ADMN 1120, ADMN 1125
Co-Requisite: none

This Capstone course is designed to integrate and reinforce the skills and knowledge learned in previous courses in the program. Project emphasis will develop the students' awareness of work flow, chain of command, and creation/integration of office documents. The use of electronic tools and the integration of documents created in various Microsoft Office Suite programs is the primary focus of this course. Students will learn from hands-on training and business examples to gain general knowledge of day-to-day office procedures. This class would be taken in lieu of an Internship. This should be taken the last semester of their program. Transfer Curriculum Goal(s): none

ADMN 2150 Internship Credits: 1-6

Prerequisite: ADMN 1120, ADMN 1125
Co-Requisite: none

This internship provides students with on-the-job experience in the student's career major. A competency-based training plan will be developed for each student in collaboration with the employer. This is a cooperative program between Central Lakes College and a participating organization to allow the student to work in an on-the-job situation. The internship program will be available to students who have demonstrated readiness and willingness to learn in a professional business organization. Students will learn from hands-on training and business examples to gain general knowledge of day-to-day office procedures. This should be taken the last semester of their program. Transfer Curriculum Goal(s): none

American Sign Language

AMSL 1410 American Sign Language I Credits: 4

Prerequisite: none
Co-Requisite: none

In this introductory course, you will engage in receptive and expressive language readiness activities as well as learn vocabulary, basic use of ASL grammatical structure and signing space, conversational regulators, fingerspelling and introductory aspects. Students will learn appropriate introductions, how to exchange personal information, sign about their surroundings, explain where they live, speak about their family and converse about activities. Basic aspects of Deaf Culture will also be integrated throughout the course. Transfer Curriculum Goal(s): 8

AMSL 1412 American Sign Language II Credits: 4

Prerequisite: AMSL 1410
Co-Requisite: none

In this level 2 introductory course, you will engage in receptive and expressive language readiness activities as well as continuing to learn vocabulary, basic use of ASL grammatical structure and signing space, conversational regulators, fingerspelling and introductory aspects. Students will learn to give directions, describe physical and personal characteristics of others, make requests and talk about family, routines and occupations. Basic aspects of Deaf Culture will also be integrated throughout the course. Transfer Curriculum Goal(s): 8

AMSL 2370 Topics in American Sign Language Credits: 1-4

Prerequisite: none
Co-Requisite: none

This course will examine selected topics of interest in American Sign Language. Offered on demand. Transfer Curriculum Goal(s): none

AMSL 2410 American Sign Language III Credits: 4

Prerequisite: AMSL 1412
Co-Requisite: none

In this level 3 course, you will engage in receptive and expressive language readiness activities as well as continuing to learn vocabulary, basic use of ASL grammatical structure and signing space, conversational regulators, fingerspelling and introductory as-

pects. Students will learn to describe placement and give directions, make requests, complaints and suggestions, ask for permission and clarification, tell about life events, nationalities and family history. In depth practice with multiple meaning words in ASL and basic aspects of Deaf Culture will also be integrated throughout the course. Transfer Curriculum Goal(s): 8

AMSL 2412 American Sign Language IV **Credits: 4**

Prerequisite: AMSL 2410

Co-Requisite: none

In this level 4 course, you will engage in receptive and expressive language readiness activities as well as continuing to learn vocabulary, basic use of ASL grammatical structure and signing space, conversational regulators, fingerspelling and introductory aspects. Students will learn to exchange in-depth personal information, describe and identify shapes, patterns and textures, and sign about weekend activities. In-depth practice with multiple meaning words in ASL and basic aspects of Deaf Culture will also be integrated throughout the course.

Transfer Curriculum Goal(s): 8

AMSL 2414 Conversational ASL **Credits: 1**

Prerequisite: AMSL 1410

Co-Requisite: none

In this course, students will build receptive and expressive conversational skills through small group work. Vocabulary and classifier building through conversational settings. Continued practice with real world experiences and discussions.

Transfer Curriculum Goal(s): 8

AMSL 2420 Deaf Culture **Credits: 3**

Prerequisite: none

Co-Requisite: none

In this introductory course students will learn about the American Deaf community and culture. Topics will include, appropriate terminology, historical aspects of Deafness, Deaf President Now protest, interpreters, cochlear implants, collectivistic vs. individualistic cultures, audism, Deaf community as a linguistic minority, Deaf humor, eugenics, Deaf literature, Deaf art, aspects of Deaf education and the Deaf community and law enforcement.

Transfer Curriculum Goal(s): 6,7

American Studies

AMST 1400 Introduction to Women's Studies **Credits: 3**

Prerequisite: none

Co-Requisite: none

In this course, we will take an interdisciplinary approach to the study of women in the United States. Issues of race, ethnicity, class, sexual orientation and age will be important as we investigate and analyze the significance of gender in shaping women's political, economic, legal and social experiences in the U.S.

Transfer Curriculum Goal(s): 5,7

AMST 2402 Gender and Popular Culture **Credits: 3**

Prerequisite: none

Co-Requisite: none

In this course we will examine how the media and popular culture shape our most fundamental understandings of gender identity. Issues of race, ethnicity, class, sexual orientation, and age will be important as we investigate and analyze the ways that the mass media – television and movies, popular music, internet, magazines, popular fiction, newspapers – portray women and gender roles. This course will require a critical analysis of how these popular presentations are socially significant.

Transfer Curriculum Goal(s): 6,7

AMST 2420 Women and Religion **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will examine the historical roles and experiences of women in a variety of religious contexts. Students will be able to demonstrate knowledge of women's religious experiences, practices and beliefs, as well as their role and status in Judaism, Buddhism, Christianity, Islam and Alternative Religions. Special attention is given to how these religions have, and are, influencing American Culture. Also covered is the distinction between "ordinary concerns and extraordinary callings" in women's lives, that is, how religion has affected both the lives of women who have integrated these religious practices into their everyday lives, and the lives of women who have stepped outside their traditional cultural norm and expressed an extraordinary calling.

Transfer Curriculum Goal(s): 5,7

Anthropology

ANTH 1457 Cultural Anthropology

Credits: 3

Prerequisite: none

Co-Requisite: none

Cultural Anthropology is the comparative study of contemporary human cultures, and includes analysis of various aspects of culture, such as language, food-getting, family and kinship, economics, politics, religion, and change.

Transfer Curriculum Goal(s): 5,8

ANTH 1598 Topics in Anthropology **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Anthropology. Offered on demand.

Transfer Curriculum Goal(s): none

ANTH 2411 Cultures of American Indians **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is an examination of Native American Cultures that will include discussion of contemporary issues facing native communities. It will focus on the distinct worldviews that influence all aspects of culture within those communities as well as their relationships with other communities, both native and non-native.

Transfer Curriculum Goal(s): 5,7

ANTH 2425 Cultures of Latin America **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course includes an overview of pre-Columbian cultures (Maya, Inca, Amazonian), the effects of the incoming Spanish and Portuguese cultures and how these roots have evolved into current Latin American situations. Issues covered include the politics, religions, economics, gender and rich cultural diversity of the area. Where does contemporary Latin America fit globally? What is the U.S. / Latin American past and present relationship? Specific countries will vary by semester.

Transfer Curriculum Goal(s): 5,8

Art

ARTS 1401 Black and White Photo I **Credits: 3**

Prerequisite: none

Co-Requisite: none

Students will learn basic shooting and compositional techniques with

the use of digital cameras. Information regarding current and cutting edge technology will be employed in the field and classroom. Students will photograph subjects on field trips, images will be converted to black and white using Adobe software and exported on printers. Critique sessions will follow in the classroom after students produce finished images. This course provides the basic framework for other photography courses.
Transfer Curriculum Goal(s): 6

ARTS 1403 Color Photo I

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will learn basic shooting and compositional techniques with the use of digital cameras. Students will learn to visualize images in the field conveying their personal vision as an artist. Students will explore the use of contrast, depth of field and focus to interpret the image during digital capture. Critique sessions will follow in the classroom. This course provides the basic framework for other photography courses.
Transfer Curriculum Goal(s): 6

ARTS 1420 The Art of Digital Photography

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to visual art, stressing the basic skills involved in creating and understanding Digital Photography. The objective of this course is to encourage the students to open their mind to the cultural significance of visual arts as well as develop the ability to use digital media as a vehicle of artistic expression. The course is composed of equal parts of lecture and creative studio work.
Transfer Curriculum Goal(s): 6

ARTS 1458 Drawing

Credits: 3

Prerequisite: none

Co-Requisite: none

This is an introductory course concerned with translation of three-dimensional form into two-dimensional visual expression. The student experiences a variety of drawing media. Creative decision-making is emphasized in the completion of compositions in still-life, landscape, figure and portrait subject matter. Skills in aesthetic judgment and constructive self-criticism will be developed through group and individual critiques. An introduction to historical, national and regional artists of various backgrounds is included.

Art major and minors should take this during their first year; also meets the liberal art requirements for non-art majors.

Transfer Curriculum Goal(s): 6

ARTS 1459 2-D Design and Color

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the elements and principles of two-dimensional design presented through study of significant master works by artists from various cultures. Projects will emphasize creative decision-making and development of the language of visual composition. This class is recommended for students going into visually oriented fields of study such as visual arts, graphic design, architecture, etc. Art majors and minors should schedule it early in their first year of study.
Transfer Curriculum Goal(s): 6

ARTS 1467 Watercolor Painting

Credits: 3

Prerequisite: none

Co-Requisite: none

Students in this course will be introduced to the use of transparent watercolor pigment and mixed medium. Emphasis is placed on the translation of 3-D form into 2-D visual expression. Creative decision-making is emphasized along with skills in aesthetic judgments and constructive self-criticism. An introduction to historical, national and regional artists of various backgrounds is included. Emphasis is also placed on the development of the elements of art and the principles of design. Individual techniques will be developed. This course is appropriate for art majors as well as students wishing to fulfill liberal arts requirements.
Transfer Curriculum Goal(s): 6

ARTS 1468 Painting

Credits: 3

Prerequisite: none

Co-Requisite: none

The purpose of this course is to introduce the student to the use of color and basic concepts and exploration in imagery through the use of opaque paint. There will be opportunities for creative decision-making, as well as development of skills in aesthetic judgments and constructive self-criticism through groups and individual critiques. Art majors and minors should take this course.
Transfer Curriculum Goal(s): 6

ARTS 1470 Art Appreciation

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the history and appreciation of art through a survey of humanity's needs and aspirations as expressed in painting, sculpture, printmaking, crafts, etc. A study of individual artists and art movement in specific context relative to the political and economical circumstances is a component of the class. Other components include critical analysis and writing requirements.
Transfer Curriculum Goal(s): 6

ARTS 1487 Ceramics:

Beginning Hand Building

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on creative three-dimensional design in clay emphasizing hand construction methods. Further emphasis is on surface treatment, the nature of clay and glaze, bisque and glaze firing. Study of aesthetics through the students' work as well as historical and contemporary masters of various cultures. This course is recommended for art majors and minors.
Transfer Curriculum Goal(s): 6

ARTS 1488 Ceramics:

Beginning Throwing

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a focus on development of basic skills in the use of the potter's wheel. Selected slide presentations of historical and contemporary potters from throughout the world and discussion of the aesthetics of pottery and vessels will be explored.
Transfer Curriculum Goal(s): 6

ARTS 1489 Intermediate Ceramics

Credits: 3

Prerequisite: ARTS 1487 or ARTS 1488

Co-Requisite: none

This course emphasizes expressive use of form and surface relating to hand building and/or the potter's wheel. Additional focus is on making and using glaze as well as firing and study of historical and contemporary artists.
Transfer Curriculum Goal(s): 6

ARTS 1510 Autumn Landscape Photography

Credits: 3

Prerequisite: none

Co-Requisite: none

This is an accelerated and intensive landscape photography course that

is scheduled for Autumn. Students will work in an outdoor setting photographing images in either color or black and white. Emphasis is placed upon specific challenges and opportunities that photographing in an outdoor setting provides. Compositional techniques and proper exposure values will be covered in great detail. All images will be captured on digital cameras. The images will be burned to compact disks and critiqued by the instructor and class.

Transfer Curriculum Goal(s): none

ARTS 1512 The Art of Photographing Wildflowers

Credits: 3

Prerequisite: none

Co-Requisite: none

This is an accelerated and intensive photography course that specializes in wildflowers. Students will work in an outdoor setting photographing images in either color or black and white. Emphasis is placed upon specific challenges and opportunities that photographing in an outdoor setting provides. Compositional techniques and proper exposure values will be covered in great detail. All images will be captured on digital cameras. The images will be burned to compact disks and critiqued by the instructor and class.

Transfer Curriculum Goal(s): none

ARTS 1596/1597/1598 Topics in Art

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Art. Offered on demand.

Transfer Curriculum Goal(s): none

ARTS 2401 Black and White Photo II

Credits: 3

Prerequisite: ARTS 1401

Co-Requisite: none

Students will explore the Zone System from visualization to capture. Students will employ the use of contrast, focus and composition to create their vision with the captured photograph. Images will be critiqued to guide the photographer along their visual journey. Students will explore a subject in depth and produce a body of work to put into practice the skills learned in ARTS 1401.

Transfer Curriculum Goal(s): 6

ARTS 2403 Color Photo II

Credits: 3

Prerequisite: ARTS 1403

Co-Requisite: none

Students will create a personal proj-

ect with digital imagery that follows their vision as a photographer. This course explores the essence of using color and tone to convey emotion and feeling with the camera. Images will be captured in color and edited using Adobe software. Critique sessions will guide the student to explore all aspects of the subject. Possible venues for the published work will be researched with each student.

Transfer Curriculum Goal(s): 6

ARTS 2485 American Indian Art

Credits: 3

Prerequisite: none

Co-Requisite: none

The purpose of this course is to introduce the student to American Indian Art through a survey of the historical art from the landmass north of Mexico. Indian art by culture areas include the Plains, the Southwest, California, the Great Basin, Pacific Plateau, the Pacific Northwest Coast, Arctic Coast, and the Woodlands. Contemporary artists and works are included.

Transfer Curriculum Goal(s): 6,7

ARTS 2486 Art History/Ancient

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of art from pre-history through the Middle Period. It includes human creativity presented through a variety of media and art forms. This course will fulfill requirements for the liberal arts degree and offers an excellent basis for cultural diversity, critical analysis and aesthetic appreciation.

Transfer Curriculum Goal(s): 6

ARTS 2487 Art History/Modern

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of art from the Middle Period through modern art. It continues from where the Art History/Ancient course stopped, but it is not necessary to take the two courses in sequence. It includes human creativity presented through a variety of media and art forms. This course will fulfill requirements for the liberal arts degree and offers an excellent basis for cultural diversity, critical analysis and aesthetic appreciation.

Transfer Curriculum Goal(s): 6

ARTS 2490 Art History/Non-Western

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of multicul-

tural art from around the world. We will study art from various countries which may include India, China, Korea, Japan, Africa and the Native Arts of the Americas and Oceania. Critical analysis and cultural diversity are components of this course.

Transfer Curriculum Goal(s): 6,8

ARTS 2583 Independent Study

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course gives the art student an opportunity to continue concentrated studies in art courses after all regularly offered classes in the specific area have been completed.

Transfer Curriculum Goal(s): none

Automotive Technology

AUTM 1101 A1 Engine Repair

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers the fundamentals of internal combustion engine operation, repair and maintenance, the procedures for removal, replacement, diagnosing, rebuilding, and assembly. Proper tool and equipment application and failure diagnosis are emphasized in this course. This course provides a minimum of 125 clock hours of the 120 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1102 A2 Automatic Transmission and Transaxle

Credits: 4

Prerequisite: none

Co-Requisite: none

This course teaches the theory of operation of automatic transmissions and transaxles and the related components. The fundamentals of service of the components of the transmissions will be introduced and practiced in this course. This course provides a minimum of 125 clock hours of the 120 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1103 A3 Manual Drive Train and Axles

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers standard automotive and light truck clutches, drive line, differential/4x4 and manual transmissions/transaxles. The clutch section includes design, adjustment, overhaul, diagnosis and repair of mechanical and hydraulic systems. The drive line section includes phasing alignment

and balance. The manual transmission/transaxle section teaches the operation theory and repair. This course provides a minimum of 100 clock hours of the 100 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1104 A4 Steering and Suspension

Credits: 4

Prerequisite: none
Co-Requisite: none

This course teaches suspension systems using leaf springs, coil springs, MacPherson struts, torsion bars and wheel balance. It also covers the principles of operation, disassembly, checks and adjustments of power and manual steering gears, and manual and power rack and pinion systems. Also teaches the procedures required for checking and adjusting wheel alignment. This course provides a minimum of 100 clock hours of the 95 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1105 A5 Brakes

Credits: 4

Prerequisite: none
Co-Requisite: none

This course teaches the principles of brakes, hydraulic system fundamentals, disc and drum brakes, parking brakes and power assist units. Also included is an introduction to ABS systems. Emphasis is placed on operation, diagnosis and repair of various types of brake systems. This course provides a minimum of 125 clock hours of the 105 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1106 A6 Electrical/Electronic Systems I

Credits: 4

Prerequisite: none
Co-Requisite: none

This course covers the theory and operation of all electrical and electronic systems on the automobile. It will cover basic electronics, starting and charging, body electronics, and computer operation. This course provides a minimum of 125 clock hours of the 230 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1107 A7 Heating and Air Conditioning

Credits: 4

Prerequisite: AUTM 1106
Co-Requisite: none

This course teaches the principles of air conditioning and its relationship to the heating system. The various types,

diagnosis of malfunctions, testing and repair are studied in the classroom. Practical experience is performed on live systems: recovering, evacuating, component replacement, charging and performance testing on the systems. This course provides a minimum of 100 clock hours of the 90 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1108 A8 Engine Performance I

Credits: 4

Prerequisite: none
Co-Requisite: none

This course teaches the theory and repair of automotive engine systems. It includes ignition systems, emission controls, electronic engine controls, and engine performance diagnosis. This course provides a minimum of 125 clock hours of the 220 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1116 A6 Electrical/Electronic Systems II

Credits: 4

Prerequisite: AUTM 1106
Co-Requisite: none

This course covers the theory and operation of all electrical and electronic systems on the automobile. It will cover basic electronics, starting and charging, body electronics, and computer operation. This course provides a minimum of 125 clock hours of the 230 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1118 A8 Engine Performance II

Credits: 4

Prerequisite: AUTM 1106, AUTM 1108
Co-Requisite: none

This course teaches the theory and repair of automotive engine systems. It includes ignition systems, emission controls, electronic engine controls, and engine performance diagnosis. This course provides a minimum of 125 clock hours of the 220 required NATEF clock hours.

Transfer Curriculum Goal(s): none

AUTM 1120 Work Place Skills 1

Credits: 1

Prerequisite: none
Co-Requisite: none

This course is designed to give the students the non-technical skills needed for a successful career in the automotive field. It deals with people skills, problem solving skills, communications and teamwork along with subjects.

Transfer Curriculum Goal(s): none

AUTM 1121 Work Place Skills 2

Credits: 1

Prerequisite: none
Co-Requisite: none

This course is designed to give the students the non-technical skills needed for a successful career in the automotive field. It deals with people skills, problem solving skills, communications and teamwork along with subjects.

Transfer Curriculum Goal(s): none

AUTM 1122 Work Place Skills 3

Credits: 1

Prerequisite: none
Co-Requisite: none

This course is designed to give the students the non-technical skills needed for a successful career in the automotive field. It deals with people skills, problem solving skills, communications and teamwork along with subjects.

Transfer Curriculum Goal(s): none

AUTM 1123 Work Place Skills 4

Credits: 1

Prerequisite: none
Co-Requisite: none

This course is designed to give the students the non-technical skills needed for a successful career in the automotive field. It deals with people skills, problem solving skills, communications and teamwork along with subjects.

Transfer Curriculum Goal(s): none

Aviation

AVIA 1110 Aeronautics

Credits: 4

Prerequisite: none
Co-Requisite: none

This course provides principles of flight, navigation, aircraft and engine operation, flight instruments, flight computer, communications, flight planning, and Federal Aviation Regulations. Successful completion of this course allows the prepared student to take the FAA Private Pilot Airmen Knowledge Exam.

Transfer Curriculum Goal(s): none

AVIA 1112 Aviation Physiology

Credits: 1

Prerequisite: none
Co-Requisite: none

This course covers the effects of human physiology including hypoxia, barotraumas, vertigo, fatigue, drugs, vision and preventive medicine, with a review of accident reports and other materials relating to casualty factors in aviation accidents & aviation safety.

Transfer Curriculum Goal(s): none

AVIA 1114 Private Flight Lab

Credits: 2

Prerequisite: none

Co-Requisite: none

This course provides actual training in flight, navigation, aircraft and engine operation, flight instruments, flight computer, communications, flight planning, and Federal Aviation Regulations. Successful completion of this course allows the student to take the FAA Private Pilot Checkride.

Transfer Curriculum Goal(s): none

AVIA 1120 Instrument Training

Credits: 4

Prerequisite: AVIA 1110, AVIA 1114

Co-Requisite: none

This course covers the instruments and systems, weathers, IFR procedures, Federal Aviation Regulations, altitude instrument flying, cross country procedures, and instrument approaches. Successful completion of this course allows the prepared student to take the FAA Instrument Pilot Knowledge Exam. This course is offered on demand.

Transfer Curriculum Goal(s): none

AVIA 1122 Instrument Training

Flight Lab

Credits: 3

Prerequisite: AVIA 1110, AVIA 1114

Co-Requisite: none

This course provides actual training in flight for navigation systems, weather, IFR procedures, FAA regulation, attitude instrument flying, cross country procedures, and instrument approaches. Successful completion of this course allows the prepared student to take the FAA instrument Pilot Checkride.

Transfer Curriculum Goal(s): none

AVIA 1130 Commercial Ground

and Flight

Credits: 4

Prerequisite: AVIA 1120, AVIA 1122

Co-Requisite: none

This course provides instruction in aircraft systems, aerodynamics, and human factors relating to aviation. Emphasis will be on Federal Aviation Regulations relevant to the federal air-space system and commercial flight. Successful completion allows the prepared student to take the Commercial Pilot FAA Knowledge Exam.

Transfer Curriculum Goal(s): none

AVIA 1132 Commercial Ground

and Flight Lab

Credits: 3

Prerequisite: AVIA 1120, AVIA 1122

Co-Requisite: none

This course provides instruction in

aircraft systems, aerodynamics, and human factors relating to aviation. Emphasis will be on Federal Aviation Regulation relevant to the federal air-space system and commercial flight. Successful completion allows the prepared student to take the Commercial Pilot FAA Knowledge Exam.

Transfer Curriculum Goal(s): none

AVIA 1140 Certified Flight Instructor

Ground and Flight

Credits: 4

Prerequisite: AVIA 1130, AVIA 1132

Co-Requisite: none

This course provides basic information leading to a CFI Certificate. The two areas covered are the fundamentals of instructing including methods helpful to flight instruction, components of the flight training syllabus, and flight instructor responsibilities including aircraft systems, aerodynamics, Federal Aviation regulations, weight and balance, performance charts, and physiology as it relates to private, commercial, and CFI Certificates.

Transfer Curriculum Goal(s): none

AVIA 1142 Certified Flight Instructor

Ground and Flight Lab

Credits: 1

Prerequisite: AVIA 1130, AVIA 1132

Co-Requisite: none

This course provides the student actual in-flight training necessary to obtain a FAA Certified Flight Instructor Certificate. Flight instruction covers all maneuvers necessary for teaching private and commercial students. Successful completion allows prepared student to take the Certified Flight Instructor (CFI) FAA Checkride.

Transfer Curriculum Goal(s): none

Biology

BIOL 1404 Human Biology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides an introduction to the structure and function of the human body using an organ systems approach. The organ systems studied include the integumentary, skeletal, muscular, circulatory, respiratory, digestive, excretory, nervous, endocrine and reproductive systems. Human development and heredity will also be integrated. Two hours lecture and two-hour lab weekly.

Transfer Curriculum Goal(s): 3

BIOL 1411 Concepts of Biology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a one-semester survey

of the fundamental concepts of biology. Topics covered may include: cell structure and function, understanding how living things grow, reproduce, acquire, and use energy, and respond to their environments, plants, animals, behavior, evolution, ecology, or biotechnology. Two hours lecture and a two hour lab weekly. This course is intended for non-science majors.

Transfer Curriculum Goal(s): 3

BIOL 1415 Environmental Biology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course takes a holistic approach to current status and future prospects of earth's life support systems emphasizing human impact on the environment. Topics include interrelationships of organisms and their environment, population dynamics, pollution, major ecosystems, examination of causes and possible solutions to major local, national and global environmental problems.

Transfer Curriculum Goal(s): 3,10

BIOL 1431 General Biology I

Credits: 5

Prerequisite: none

Co-Requisite: none

An introduction to the basic life process at the cellular level including the chemistry of life, organization of the cell, membranes, energy, enzymes, respiration, photosynthesis, cell division, Mendelian genetics, molecular genetics (DNA), and genetic engineering. There is a strong emphasis on problem solving and the scientific process.

Transfer Curriculum Goal(s): 3

BIOL 1432 General Biology II

Credits: 5

Prerequisite: none

Co-Requisite: none

A macroscopic approach to biology covering the topics of evolution, ecology and biodiversity of living organisms. Topics include taxonomy and classification of the major groups of plants and animals, structure and function, development, and behavior. Lecture and laboratory. For majors and non-majors.

Transfer Curriculum Goal(s): 3,10

BIOL 2401 Nutrition

Credits: 2

Prerequisite: CHEM 1405 or CHEM 1414 or CHEM 1424 or BIOL 1431 or BIOL 2467

Co-Requisite: none

This course examines the basic principles of nutrition, including the

composition, sources and dietary requirements for carbohydrates, lipids, proteins, water, vitamins and minerals, the effects of deficiencies and toxicity, diet planning, digestive system anatomy and physiology, and energy balance.

Transfer Curriculum Goal(s): 3

BIOL 2411 Biology of Women

Credits: 3

Prerequisite: none

Co-Requisite: none

A biology course designed to introduce the concepts of biology in the context of human reproductive anatomy and physiology. Topics covered include: human genetics; menstrual cycles and disorders; pregnancy, labor and delivery; infertility and reproductive technology; fetal development; contraception; sexually-transmitted diseases; reproductive organ cancers; and menopause. Not for Women Only! Transfer Curriculum Goal(s): 3

BIOL 2415 General Ecology

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is structured so that students can see the variations and complexities of nature. Topics cover The Physical environment, the organism and the environment, populations, species interactions, community, and ecosystem dynamics. Lecture is accompanied by laboratory and field exercises.

Transfer Curriculum Goal(s): 3,10

BIOL 2457 Microbiology

Credits: 4

Prerequisite: BIOL 1404 and CHEM 1405, or BIOL 1404 and CHEM 1414, or BIOL 1404 and CHEM 1424, or BIOL 1431, or BIOL 2401, or BIOL 2467

Co-Requisite: none

Microbiology is the study of microbes such as bacteria, viruses, and fungi. Structure and function of microbes are examined, with an emphasis placed on the transmission, pathogenesis and control of microbial infections. In addition to medical aspects, the course covers environmental and industrial roles of microbes. Microbiological lab techniques include culturing, staining, and identification of microbes. This course meets for two hours of lecture and two 2-hour labs weekly. It is designed for liberal arts and sciences students, biology, nursing and other science related fields.

Transfer Curriculum Goal(s): 3

BIOL 2467

Anatomy and Physiology I

Credits: 4

Prerequisite: BIOL 1404 or BIOL 1411 or BIOL 1431 or CHEM 1405 or CHEM 1414 or CHEM 1424

Co-Requisite: none

The first of a two-course sequence in which the details of the human body are explored beginning with the organization of the human body that includes a comprehensive study of (bio)chemistry, cytology and histology. Then proceeds to investigate both the anatomy (structures) and physiology (functions) of the: integumentary, skeletal, muscular, nervous, (and an introduction to the) endocrine systems. For liberal arts and sciences students, biology, nursing and other science related fields.

Transfer Curriculum Goal(s): 3

BIOL 2468 Anatomy and Physiology II

Credits: 4

Prerequisite: BIOL 2467 with grade of "C" or higher

Co-Requisite: none

The second of a two-course sequence designed to investigate the anatomy and physiology of the remaining organ systems including the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Three hours lecture and a three-hour lab weekly. For liberal arts and sciences students, biology, nursing and other science related fields.

Transfer Curriculum Goal(s): 3

Business

BUSN 1102 Accounting for

Non-Accountants

Credits: 3

Prerequisite:

Co-Requisite: none

This course is a practical introduction to accounting, the language of business, for business owners and managers. Both the how and the why of accounting principles and practices are blended to provide a foundation for the financial management of service and merchandise businesses. The procedural based model of instruction provides a hands-on learning experience for students. The course is recommended for all business careers outside of the accounting field.

Transfer Curriculum Goal(s): none

BUSN 1131 Business Math

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed to provide mathematical knowledge and skills needed to make calculations necessary to solve business problems. The course covers the following topics:

Banking, Solving for the Unknown, Percents, Discounts, Markups and Markdowns, Payroll, Simple Interest, Installment Buying, Home Ownership, Taxes, Insurance, Stocks, Bonds, Mutual Funds, Business Statistics, and Small Business Budgeting.

Transfer Curriculum Goal(s): none

BUSN 1166

Business Communications

Credits: 3

Prerequisite: none

Co-Requisite: none

This course emphasizes the importance of individual and organizational image when communicating in any matter with customers, fellow employees and employers. A concept-and-practice approach focuses on purpose, content, and planning.

Transfer Curriculum Goal(s): none

BUSN 1501 Introduction to Business

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of the forces that shape business in American and overview of how American business responds. Topics include business economics, forms of business organizations, management functions, marketing procedures, business finance, and insurance considerations.

Transfer Curriculum Goal(s): none

BUSN 2541 Legal Environment of

Business

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of the political and legal framework within which American businesses operate. Topics include the nature and formation of law and its application to business, constitutional, administrative, criminal, and international laws, contracts, torts, product liability, cyber law, bankruptcy, consumer protection, environment, real property, business organization, and employee relations.

Transfer Curriculum Goal(s): none

Center for Manufacturing and Applied Engineering

CMAE 1502 Technical Math

Credits: 3

Prerequisite: Accuplacer Arithmetic score of 45 and Reading score of 52

Co-Requisite: none

This is an introductory technical math course. The course is designed for stu-

dents who have basic math skills and for those who need a review of basic technical math concepts. The primary goals of this course are to help individuals acquire a solid foundation in the basic skills of math/shop algebra and geometry. This course will show how these skills can model and solve authentic real-world problems. This is a blended online course utilizing Tooling "U", D2L & proctored unit exams. Transfer Curriculum Goal(s): none

CMAE 1506 Introduction to Computers

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

This course provides essential, hands-on coverage of Microsoft Office 2007 suite which includes: Getting started with Microsoft Office 2007, Word 2007, Excel 2007, Access 2007, Powerpoint 2007, Email/Netmail, Desire to Learn, Smart Thinking, Computer Security and E-folio Building.

Transfer Curriculum Goal(s): none

CMAE 1510 Print Reading

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

This course will orient students in the basic skills and abilities required for understanding prints utilized in a manufacturing/industrial environment. Emphasis will be on interpretation of geometric dimension and tolerance symbols/principles, alphabet of lines, multi-view drawing (including orthographic projection, isometric views, and perspective drawing), title blocks, revision systems, identification of general/local notes, dimensions and tolerances, basic principles of math/geometry in relation to mechanical print reading, and, interpretation of basic weld symbols. The course will cover techniques of basic shop sketching and interpretation of three-dimensional drawings.

Transfer Curriculum Goal(s): none

CMAE 1514 MSSC Safety

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

This course is designed to prepare students for the Manufacturing Skill Standards Council's (MSSC) Safety Certification Assessment. The course curriculum is based upon federally-endorsed national standards for production workers. The course will introduce OSHA standards relating

to personal protective equipment, HAZMAT (hazardous materials) communication, tool safety, confined spaces, electrical safety, emergency response, lockout/tagout and others. Transfer Curriculum Goal(s): none

CMAE 1518 MSSC Manufacturing Processes and Production

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

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.

Transfer Curriculum Goal(s): none

CMAE 1522 MSSC Quality

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

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.

Transfer Curriculum Goal(s): none

CMAE 1526 MSSC Maintenance

Awareness

Credits: 2

Prerequisite: Accuplacer

Reading score of 52

Co-Requisite: none

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.

Transfer Curriculum Goal(s): none

CMAE 1530 Machining Math

Credits: 2

Prerequisite: Accuplacer Arithmetic score of 62 or higher, CMAE 1502

Co-Requisite: none

This math course is designed for students in a machine shop environment. The primary goal of this course is to help individuals acquire a solid foundation in the basic skills of math that relate to machine shop and industrial manufacturing. This course will show how these skills can model and solve authentic real world problems.

Transfer Curriculum Goal(s): none

CMAE 1532 Machine Tool Print

Reading

Credits: 2

Prerequisite: Accuplacer Reading

score of 52 or greater, CMAE 1510

Co-Requisite: none

This course will orient students in skills and abilities required for understanding prints used in a machining environment. Emphasis will be on use and interpretation of geometric dimensioning, tolerance, and symbols used in machining of a part or assembly of a group of machined parts. Students will be introduced to and use basic principles of math/geometry, surface symbols, geometric tolerances, welding symbols, material types, sections and sectional views.

Transfer Curriculum Goal(s): none

CMAE 1534 Machine Tool

Technology Theory

Credits: 2

Prerequisite: CMAE 1530 & CMAE 1532

Co-Requisite: none

This course covers measurement tools and uses, cutting tools and types, machine shop tools such as band saws, lathes, vertical milling machines, basic machine tool set-up, operations of machine tools, terminology used within the scope of machining processes.

Transfer Curriculum Goal(s): none

CMAE 1536 Machine Tool

Technology Lab I

Credits: 2

Prerequisite: CMAE 1534

Co-Requisite: none

This course will address the basic operations of drill presses, tool grinders, vertical milling machines, engine lathes and metal cutting saws. Machine safety, machine component identification, as well as turning, milling sawing, bench work project layout,

single point tool grinding projects are also included in the course. Students will be introduced to the proper use and care of inspection measuring tools.

Transfer Curriculum Goal(s): none

CMAE 1538 Machine Tool Technology Lab II

Credits: 2

Prerequisite: CMAE 1536

Co-Requisite: none

This course will address the advanced operations of a drill press, vertical milling machine, engine lathe, surface grinder and saws, machine safety, machine component identification, as well as turning, milling, sawing, surface grinding lab projects. Students will also learn the care of and use of high precision measuring equipment.

Transfer Curriculum Goal(s): none

CMAE 1542 Geometric Dimensioning and Tolerancing Credits: 2

Prerequisite: CMAE 1532

Co-Requisite: none

Students will learn how to read prints with geometric dimensioning and tolerance applications. Each of the geometric controls will be examined so that the student is able to determine the allowable variation in form and size between part features. The Y14.5 M standard will be part of the overall instruction. Using precision equipment, most of the geometric controls will be inspected to print specifications.

Transfer Curriculum Goal(s): none

CMAE 1550 DC Power Credits: 3

Prerequisite: CMAE 1502

Co-Requisite: none

This course covers the basic principals in DC electrical circuits including series, parallel and complex circuit analysis, OHM's law, electrical meters, conductor, insulators, resistors, batteries and magnetism. The course material covered will enable students to calculate circuit parameters, build electrical circuits, use testing equipment to measure and troubleshoot circuit and electrical components.

Transfer Curriculum Goal(s): none

CMAE 1554 Digital Electronics Credits: 3

Prerequisite: CMAE 1502

Co-Requisite: none

In this course learners will acquire a fundamental knowledge of digital electronics. Boolean algebra, numbering systems covered include hexadecimal, binary, BCD, and octal. Digital devices and circuits, analog to digital

conversion along with digital to analog conversion will be covered. Learners will build and test basic digital circuits, test circuits to digital truth tables, troubleshoot circuits as required.

Transfer Curriculum Goal(s): none

Chemistry

CHEM 1405 Life Science Chemistry Credits: 3

Prerequisite: none

Co-Requisite: none

This course will provide the student with an introduction to general, organic and biological chemistry. Topics include: scientific measurement, atomic and molecular structure, periodicity, chemical bonding, nomenclature, chemical reactions, nuclear chemistry, solutions, acids, bases, organic functional groups, carbohydrates, lipids, amino acids, proteins and enzymes.

Transfer Curriculum Goal(s): 3

CHEM 1406 Life Science Chemistry Lab Credits: 1

Prerequisite: none

Co-Requisite: none

The activities in this laboratory are used to enhance understanding of concepts and theories discussed in the Life Science Chemistry lecture course. A variety of methods and equipment used in scientific inquiry will be employed in verification of various scientific laws and theories. Students will perform laboratory protocols, collect data, make calculations, assess outcomes, and form conclusions.

Transfer Curriculum Goal(s): 3

CHEM 1410 Environmental Chemistry Credits: 3

Prerequisite: none

Co-Requisite: none

This course includes simplified topics in scientific measurement, atomic theory, bonding theory, states of matter, chemical reactions, hydrocarbons and fossil fuels, batteries, fuel cells, electrolysis, water sources, water pollution and purification.

Transfer Curriculum Goal(s): 3,10

CHEM 1414 Fundamentals of Chemistry Credits: 4

Prerequisite: none

Co-Requisite: none

This course involves the study of general laws of chemistry, periodicity, atomic and molecular structure, physical and chemical changes.

Transfer Curriculum Goal(s): 3

CHEM 1424 Chemical Principles I Credits: 5

Prerequisite: MATH 1506

Co-Requisite: none

This course includes a more rigorous collegiate treatment of topics in physical measurement, dimensional analysis, state of matter, nomenclature, chemical reactions, stoichiometry, gas laws, thermochemistry, atomic structure, and molecular bonding theory.

Transfer Curriculum Goal(s): 3

CHEM 1425 Chemical Principles II Credits: 5

Prerequisite: CHEM 1424

Co-Requisite: none

This course is a continuation of CHEM 1424 and includes topics in gases and their properties, intermolecular forces and liquids, chemistry of solids, solutions and their behavior, chemical kinetics, chemical equilibria, acid-base theories, common ion and buffer systems, precipitation reactions, thermodynamics and equilibrium, and an introduction to organic chemistry.

Transfer Curriculum Goal(s): 3

CHEM 2472 Organic Chemistry I Credits: 5

Prerequisite: CHEM 1425

Co-Requisite: none

This course involves a thorough coverage of the aliphatic classes of compounds involving the study of structure, nomenclature, physical properties, preparation, reactions and analysis of these compounds. Also included in this course is the study of reaction mechanisms.

Transfer Curriculum Goal(s): 3

CHEM 2473 Organic Chemistry II Credits: 5

Prerequisite: CHEM 2472

Co-Requisite: none

This course is a continuation of CHEM 2472 and involves a thorough coverage of the aliphatic and aromatic classes of compounds involving the study of structure, nomenclature, physical properties, preparation, reactions and analysis of these compounds. Also included is the study of reaction mechanisms.

Transfer Curriculum Goal(s): 3

Child Development

CDEV 1100 Foundations of Child Development Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides an overview of typical and atypical child

development across cultures, from prenatal through school age including physical, social-emotional, language, cognitive, aesthetic, and identity/individual development. It integrates developmental theory with appropriate practices in variety of early childhood care education settings.

Transfer Curriculum Goal(s): none

CDEV 1105 Child Safety, Health and Nutrition

Credits: 4

Prerequisite: none

Co-Requisite: none

This course will guide the student in obtaining skills needed to establish and maintain a physically and psychologically safe and healthy learning environment for young children. Topics include preventing illness and accidents, handling emergencies, providing health, safety and nutrition education experiences, meeting children's basic nutritional needs, child abuse and current health related issues.

Transfer Curriculum Goal(s): none

CDEV 1110 Guidance: Managing the Physical/Social Environment

Credits: 4

Prerequisite: none

Co-Requisite: none

This course provides an exploration of the physical and social environments that promote learning and development for young children. It includes an introduction to basic child guidance techniques for individual and group situations. Emphasis is on problem-prevention and positive guidance strategies, including: communication, limit-setting, problem-solving, encouragement, and behavior modification. Students will apply their knowledge of the environment's role to an actual work setting.

Transfer Curriculum Goal(s): none

CDEV 1115 Planning and Implementing Curriculum

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines the role of the teacher in early childhood settings. It applies the knowledge of child development as it relates to individual children, communities, curriculum and communication activities.

Transfer Curriculum Goal(s): none

CDEV 1120 Professional Relations in Early Childhood Careers

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will guide the student in

obtaining skills needed to establish and maintain a psychologically, safe learning environment for young children. Topics include child abuse, child neglect, reporting and educational experiences.

Transfer Curriculum Goal(s): none

CDEV 1130 Infant/Toddler Development and Learning

Credits: 4

Prerequisite: none

Co-Requisite: none

This course provides an overview of infant/toddler theory and development in home or center-based settings. Students will integrate knowledge of developmental needs, developmentally appropriate environments, effective care giving, teaching strategies, and observations methods.

Transfer Curriculum Goal(s): none

CDEV 1133 Creative Developmental Experiences

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines the development of children with special needs and prepares caregiver/teachers to integrate children with special needs into child development settings. The course includes review of legislation affecting children with disabilities, classroom strategies to meet the needs of a child with disabilities, the child within the family and community and overview of a variety of disabling conditions which might affect a young child.

Transfer Curriculum Goal(s): none

CDEV 1135 Profiles of Exceptional Child

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an exploration of individual difference in the areas of mental retardation, orthopedic handicaps, visual and hearing impairments, speech and language disorders, learning disabilities, emotional and behavioral disorders, and the gifted. It is an introduction to the field of special needs. Although it is designed for students in the CDEV program, it is appropriate for persons who are interested in Special Education, either teachers, teacher's aides, childcare providers, or parents.

Transfer Curriculum Goal(s): none

CDEV 1150 Childcare Business Strategies

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides students with an introduction to budgeting, financial management, and financial record keeping in child development programs. Specific topics include: start-up costs, determining utilization rates, setting/collecting parent fees, identifying break-even points, preparing financial statements, and fundraising.

Transfer Curriculum Goal(s): none

CDEV 1160 Internship

Credits: 1-4

Prerequisite: instructor's consent

Co-Requisite: none

This course provides the student an opportunity to integrate theory and practice, applying knowledge and skills in an instructor approved, licensed pre-school development setting. Students participate in the setting as members of the teaching team. Students implement a variety of learning experiences that are developmentally appropriate and culturally sensitive for a specific group of children. Students complete a portfolio documenting learning experiences based on selected BOT standards.

Transfer Curriculum Goal(s): none

CDEV 1162 Internship in Specialized Setting

Credits: 2

Prerequisite: none

Co-Requisite: none

This course provides on the job training for students interested in working with children with special needs. This course will create connections with future employers and provide students with an opportunity to reinforce previously introduced content regarding instructional planning, working with families, collaboration, and theories of disabilities.

Transfer Curriculum Goal(s): none

CDEV 1300 Not by Chance: Childcare that Supports School Readiness

Credits: 1

Prerequisite: none

Co-Requisite: none

This course facilitates defining, analyzing, and applying information surrounding the MN Early Childhood Indicators of Progress, MN Core Competencies, and a MN Quality Rating System for Childcare as presented by the MN Department of Education.

Transfer Curriculum Goal(s): none

CDEV 1305 Child Abuse and Neglect

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will guide the student in

obtaining skills needed to establish and maintain a psychologically, safe learning environment for young children. Topics include child abuse, child neglect, reporting and educational experiences.

Transfer Curriculum Goal(s): none

CDEV 1306 Child Safety

Credits: 1

Prerequisite: none

Co-Requisite: none

This course offers an opportunity to learn and practice accident prevention procedures, emergency, and safety education learning experiences.

Transfer Curriculum Goal(s): none

CDEV 1307 Child Health

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will guide the student in obtaining skills needed to establish a healthy learning environment for young children. Topics include preventing illness and providing healthy educational experiences.

Transfer Curriculum Goal(s): none

CDEV 1308 Nutrition

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will guide the student in obtaining skills needed to establish policies and practices that meet basic nutritional needs of young children. Topics include policies and procedures of a developmentally appropriate nutrition program, appropriate nutritional education activities for infants through school age children.

Transfer Curriculum Goal(s): none

CDEV 1323 Guidance: Developmentally Appropriate Practice

Credits: 1

Prerequisite: none

Co-Requisite: none

Emphasis will be placed on applying and practicing strategies and techniques to sensory, cognitive, social-emotional, language and creative learning environments. Designed for anyone working in the child care and development industry.

Transfer Curriculum Goal(s): none

CDEV 1394/1395/1396/1397/1398 Topics in Child Development

Credits: 1

Prerequisite: none

Co-Requisite: none

Trends, issues, conference tracks may be chosen as a topic of study. Students apply knowledge of the chosen topic to actual programs for children ages 0-8 years.

Transfer Curriculum Goal(s): none

CDEV 2100 Introduction to Foundations of Public School Education

Credits: 3

Prerequisite: none

Co-Requisite: none

Introduction to the Foundations of Public Education addresses the historical, social, and political foundations of education in the United States. Students will examine the roles, functions, and responsibilities of preschool, elementary, and secondary classroom teachers.

Transfer Curriculum Goal(s): none

CDEV 2102 Foundations of Early Education

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will gain an understanding about philosophical, historical, pedagogical, societal, and institutional foundations of infant/toddler, pre primary, and primary grade education. Attention is given to efforts of modern programs to adapt instruction to developmental levels, backgrounds of young children, and to work in partnership with parents. Students gather and read information, then integrate and communicate knowledge of issues to real-life contexts. A service learning project is included in this course.

Transfer Curriculum Goal(s): none

CDEV 2110 Characteristics of Students w/Learning and Behavior Disorders

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focus is on characteristics and issues related to students with learning disabilities and emotional behavioral disorders. The student will strengthen effective educational practice, promote inquiry, and build leadership skills for regular and special educations and professionals in related fields.

Transfer Curriculum Goal(s): none

CDEV 2112 Collaboration Skills and Transition Training

Credits: 3

Prerequisite: none

Co-Requisite: none

To best create a seamless system of transition for students with disabilities from secondary to post secondary environments, students will analyze and apply various collaboration methods with agencies, educational staff and multicultural populations. Emphasis

will be given to the process of coordination of multiple service agencies in those transitions.

Transfer Curriculum Goal(s): none

CDEV 2114 Introduction to Autism Spectrum Disorder

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is an overview of autism spectrum disorders. Focus will be given to characteristics of individuals who have been identified as having autism, Asperger's syndrome and childhood disintegrative disorders.

Transfer Curriculum Goal(s): none

CDEV 2120 Understanding and Supporting Parenting

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on parent-child relationships including adult development, family systems theory, parental authority, child compliance and developmental interaction during child rearing years. Parenting in diverse family configurations, diverse cultures, and lifestyles, and parenting in high-risk families will be explored. This course includes an emphasis on knowledge of research for application and collaboration to promote child's learning.

Transfer Curriculum Goal(s): none

CDEV 2340 Professional Leadership

Credits: 3

Prerequisite: none

Co-Requisite: none

This course prepares students to take an active/advocate role in the child development profession by examining the history, current trends, and future of child care and early childhood education.

Transfer Curriculum Goal(s): none

CDEV 2343 School Age Development and Learning

Credits: 4

Prerequisite: none

Co-Requisite: none

This course provides students with an overview of school age development: physical, cognitive, creative, and social/emotional. It integrates theory with developmentally appropriate practice in home and center based settings. Several guidance strategies will be addressed including problem-solving, group meetings and team building.

Transfer Curriculum Goal(s): none

CDEV 2350 Practicum I

Credits: 3

Prerequisite: instructor's consent
Co-Requisite: none

This course provides an opportunity to apply knowledge and skill in an early childhood setting. Students implement a variety of learning experiences that are developmentally appropriate for and culturally sensitive to a specific age and group of children.
Transfer Curriculum Goal(s): none

CDEV 2352 Practicum II

Credits: 3

Prerequisite: instructor's consent
Co-Requisite: none

This course provides an opportunity to apply knowledge and skill in an early childhood setting. Students implement a variety of learning experiences that are developmentally appropriate for and culturally sensitive to a specific age and group of children.
Transfer Curriculum Goal(s): none

College and Career Studies

CCST 1300 Transition to College for Students with Special Needs

Credits: 2

Prerequisite: none
Co-Requisite: none

This course is designed for students with special needs who plan to enroll in a post-secondary institution. The course provides students with tools for self-advocacy, identifies care agency resources available to them, and assesses career goals in relationship to abilities and skills. In addition, the course will result in the development of an educational plan and links them to college resources.

Transfer Curriculum Goal(s): none

CCST 1510 College Success Skills

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to promote student and lifelong success. Course content generally includes academic skills, life management skills, and information about school & community. Specific topics include: goal setting, learning styles, college reading strategies, study techniques, time management, test-taking skills, memory techniques, stress reduction, critical thinking applications, communication tips, assertiveness, relationship building, cultural diversity awareness, health and wellness issues, college and community resources, financial planning and the many personal issues that may affect college students.
Transfer Curriculum Goal(s): none

CCST 1512 Combat to Classroom

Credits: 2

Prerequisite: none
Co-Requisite: none

This course will assist students to understand the unique needs of Veteran, military members and their families as they transition from their military related experiences to the college environment and the community. Particular focus will be on, but not be limited to: The development process for the service member and their family related to separation and reconnecting from deployments, the emotional issues related to military service and combat experiences, the physical/disability issues related to military service and combat experiences, the issues of stress and anxiety including Post Traumatic Stress Disorder (PTSD), the issue of racism as it relates to military and combat experiences, the physical and emotional health, financial, and other services available, the campus and community based support services and activities for veterans, military members and their families, and the role of civic engagement in the transition process for veterans and military members.

Transfer Curriculum Goal(s): none

CCST 1514 Information Literacy and Research Skills

Credits: 1

Prerequisite: none
Co-Requisite: none

This course will provide an introduction to research and information seeking skills, with an understanding of how information and knowledge are produced and organized in a societal context. A student will be able to create a strategy for finding information, and learn how to use both print and electronic sources, how to evaluate the information found, and how to formally cite the information. Students will gain an understanding and appreciation for intellectual freedom and copyright.

Transfer Curriculum Goal(s): none

CCST 1520 Career Planning

Credits: 2

Prerequisite: none
Co-Requisite: none

This course provides a comprehensive approach to career planning, educational planning, and decision making. The course begins with a self-exploration process in which students examine their values, personality characteristics, interests, strengths, skills, and goal setting. Current trends, occupational information, job seeking skills, and other resources will be explored to evaluate career options and

educational goals.

Transfer Curriculum Goal(s): none

CCST 1530 Employment Strategies

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to provide the student an opportunity to research and explore all aspects of employment seeking strategies. Students will develop job-search strategies that will lead to more effective marketing of their skills. Critical components of the course include: planning your job search, gathering the tools (resumes, cover letters), beginning the search, interviewing and evaluating job offers.
Transfer Curriculum Goal(s): none

CCST 1541 Student Senate I

Credits: 1

Prerequisite: none
Co-Requisite: none

This is a first year course that provides a practical introduction to leadership. Students will study and apply the theories of leadership through the weekly Student Senate meetings, student activities, and service learning projects. This course is designed to prepare students for a lifetime of engaged, responsible, and active community involvement.

Transfer Curriculum Goal(s): none

CCST 1542 Student Senate II

Credits: 1

Prerequisite: none
Co-Requisite: none

This second year course provides a practical introduction to leadership. Students will study and apply the theories of leadership through the weekly Student Senate meetings, student activities, and service learning projects. This course is designed to prepare students for a lifetime of engaged, responsible, and active community involvement.

Transfer Curriculum Goal(s): none

CCST 1550 On Course: Introduction to College

Credits: 1

Prerequisite: none
Co-Requisite: none

This course will provide college students with the skills necessary to make a successful transition to college. In this course, students will gain personal insight and identify strategies that will help them reach their educational and personal goals. Course activities will focus on introducing students to the skills that are needed for academic success, such as time management, educational planning, strategies for learning and use of

college resources.
Transfer Curriculum Goal(s): none

CCST 1552 On Course: Success Strategies for Athletes
Credits: 1

Prerequisite: none
Co-Requisite: none
A course designed for the student athlete which addresses both the study skills necessary to succeed academically and the complex athletic eligibility requirements (COA/NJCAA/NAIA) that govern present and future athletic competition.
Transfer Curriculum Goal(s): none

CCST 1554 On Course: Strategies for Re-Entry Students
Credits: 2

Prerequisite: none
Co-Requisite: none
Designed to give students, who are returning to school after some absence, an introduction to and practice in skills to successfully complete college level studies. This course is intended to facilitate students' confidence in their abilities to succeed through: an introduction to academic skills and effective communication, assessment of campus, family, personal and financial resources, and an exploration of college goal choices. Also included are techniques to help students discover and overcome common barriers such as: fear, time constraints, family resistance and personal stressors.
Transfer Curriculum Goal(s): none

CCST 1558 Introduction to e-Learning
Credits: 1

Prerequisite: none
Co-Requisite: none
This course provides students with the basic technology skills needed to become successful online learners, such as file management, attaching documents to email, posting to discussion boards, and an overview of how to navigate an online or hybrid course. It also gives them practical experience as an online learner by using a Course Management System (Desire2Learn). This course prepares students to be successful by examining study strategies in the online environment.
Transfer Curriculum Goal(s): none

CCST 1559 Money Management Skills
Credits: 1

Prerequisite: none
Co-Requisite: none
This course introduces students to basic money management skills so they will make informed decisions in man-

aging their personal finances. Topics include understanding the student loan process and obligations, creating a budget, debt management, use of credit and credit cards, credit reports, checking and savings accounts, banking basics, insurance issues, developing a personal financial plan and setting financial goals.
Transfer Curriculum Goal(s): none

CCST 1560 Math without Fear
Credits: 2

Prerequisite: none
Co-Requisite: none
The goal of this course is to help you grow academically and personally. The course is ideal for you if your career goals are still unclear or if you have reached a point in your life where you "feel stuck." Topics include self-assessment, logical reasoning, study skills, goal setting, and active learning. You will have opportunities to grow in the ways you think, learn, and communicate.
Transfer Curriculum Goal(s): none

CCST 1570 Thinking, Learning and Communicating
Credits: 3

Prerequisite: none
Co-Requisite: none
The goal of this course is to help you grow academically and personally. The course is ideal for you if your career goals are still unclear or if you have reached a point in your life where you "feel stuck." Topics include self-assessment, logical reasoning, study skills, goal setting, and active learning. You will have opportunities to grow in the ways you think, learn, and communicate. It is recommended that students enroll in PSYC 1411 Personal Growth & Behavior concurrently or the following semester.
Transfer Curriculum Goal(s): none

CCST 1590 Service Learning and Civic Engagement
Credits: 1

Prerequisite: none
Co-Requisite: none
Students in this course develop and/or implement service learning project to help the college's community including the surrounding local community under the supervision of college faculty and in cooperation with the staff of community organizations and agencies. Projects may include collaboration with college classes, various community agencies and organizations, education projects for college students, mentoring and shadowing. Students gain hands-on experience in project planning, development, imple-

mentation and evaluation.
Transfer Curriculum Goal(s): none

CCST 1598 Topics in CCST
Credits: 1-3

Prerequisite: none
Co-Requisite: none
This course will examine selected topics of interest in College & Career Studies. On demand.
Transfer Curriculum Goal(s): none

CCST 2512 Honors Leadership Development
Credits: 3

Prerequisite: Admission to Honors Program
Co-Requisite: none
The Phi Theta Kappa Leadership Development Studies is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films, and contemporary readings on leadership. The foundation of Phi Theta Kappa Leadership Development Studies is the observation and study of great leaders portrayed in the Humanities by writers, historians, and film-makers as well as the observation and study of the works of great leaders themselves. This integration of readings from the Humanities is a unique aspect of Phi Theta Kappa Leadership Development Studies. The leadership wisdom contained in the selections from ancient Greece and China, Renaissance Europe, Early America, and twentieth century Europe, America, and Africa, is often overlooked by traditional leadership development curricula. In addition, this course provides leadership development opportunities for students committed to becoming service leaders. It is the objective of this course to unleash the leadership potential of our diverse individuals to allow them to emerge as tomorrow's community leaders.
Transfer Curriculum Goal(s): none

CCST 2514 Honors Service Learning Experience
Credits: 1

Prerequisite: Admission to Honors Program
Co-Requisite: none
Students in this course develop and/or implement a service learning project to help the college's community including the surrounding local community under the supervision of college faculty and in cooperation with the staff of community organizations

and agencies. Projects may include collaboration with college classes, various community agencies and organizations, education projects for college students, mentoring and shadowing. Students gain hands-on experience in project planning, development, implementation and evaluation.

Transfer Curriculum Goal(s): none

Communication Art & Design

CART 1100 Design and Layout I

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a general overview into the methods of designing printed two-dimensional communications. Page layout/formats, design, typography, the use of photos and illustrations, psychological and aesthetic uses of color will be covered. These subjects are used as the underlying structure in the visual communication process.

Transfer Curriculum Goal(s): none

CART 1102 Design and Layout II

Credits: 4

Prerequisite: CART 1100

Co-Requisite: none

This course is a continuation of the processes taught in Design and Layout I, in addition, this course will teach the student how to "brainstorm" ideas in a systematic way turning out multiple solutions to problems.

Transfer Curriculum Goal(s): none

CART 1110 Adobe Photoshop

Credits: 2

Prerequisite: none

Co-Requisite: none

Students will learn the tools and techniques of Adobe Photoshop software. They will learn how to create, edit, color correct and specialize areas of various graphics and photographs.

Transfer Curriculum Goal(s): none

CART 1112 Adobe Illustrator

Credits: 2

Prerequisite: none

Co-Requisite: none

Students will learn Adobe Illustrator in creating vector based graphics necessary for creating postscript logos and illustrations.

Transfer Curriculum Goal(s): none

CART 1114 Page Layout

Credits: 2

Prerequisite: none

Co-Requisite: none

Students will learn concise techniques used to assemble text and images into single and multiple page docu-

ments that will be published in various formats.

Transfer Curriculum Goal(s): none

CART 1115 Illustration

Credits: 2

Prerequisite: none

Co-Requisite: none

Students will produce illustrations using a combination of manual and digital methods to accompany a variety of communication needs such as books, magazines and packaging.

Transfer Curriculum Goal(s): none

CART 1118 Website Construction

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers the basics of web site construction and maintenance. Using Adobe Dreamweaver students will design and implement web sites. Image manipulation and FTP software will also be covered.

Transfer Curriculum Goal(s): none

CART 1120 Publication Design

Credits: 3

Prerequisite: CART 1110, CART 1110, CART 1112, CART 1114

Co-Requisite: none

This course covers the design and production of a variety of publications, books, instructional manuals, newspapers, magazines, advertising, CD booklets and so on.

Transfer Curriculum Goal(s): none

CART 1124 Corporate ID

Credits: 3

Prerequisite: none

Co-Requisite: none

This course explores the development of symbols, logos and brand identity that reflect a product or company's image. The student will prepare business identities and apply them to multiple branding pieces.

Transfer Curriculum Goal(s): none

CART 1126 Media Lighting and Sound

Credits: 3

Prerequisite: none

Co-Requisite: none

This is an introductory course split into two sub-classes. Media lighting will concentrate on proper set up and aiming of television-style lighting systems in both indoor and outdoor settings. The audio portion of this course will consist of gaining the skills necessary for recording various sounds through microphones. Students will be instructed in the use of wireless microphones, boom microphones, built-in microphones and mixers. Computer software equipment used for audio

production will be incorporated into the curriculum.

Transfer Curriculum Goal(s): none

CART 1128 Media Production

Credits: 4

Prerequisite: none

Co-Requisite: none

This course shows how to start building outstanding motion graphics and animations for video productions. Students will work in 3D space creating depth with lights and shadows.

Transfer Curriculum Goal(s): none

CART 1136 Copywriting

Credits: 3

Prerequisite: none

Co-Requisite: none

In this course students will understand the role of a copywriter in the advertising industry. They will be able to identify strong copywriting in advertising media and also write copy for these medias.

Transfer Curriculum Goal(s): none

CART 2100 Design and Layout III

Credits: 4

Prerequisite: CART 1102

Co-Requisite: none

Studio course continues the process and purpose of graphic design. Understanding the creative process and how to generate ideas, problem solving methodologies and implementation of design principles and elements while designing across all medias. The student will develop their own personal style and approach towards design and to produce professional work.

Transfer Curriculum Goal(s): none

CART 2102 Design and Layout IV

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a continuation of the subject matter taught in Design & Layout III. The student will develop his/her own personal style and approach towards creating original designs. The goal will be to produce professional personal work. It is recommended that students enroll in CART 2100 prior to enrollment in CART 2102.

Transfer Curriculum Goal(s): none

CART 2111 Computer Graphics I

Credits: 3

Prerequisite: CART 1110, CART 1112, CART 1114

Co-Requisite: none

In this course students will learn advanced skills in a work flow using Illustrator, Photoshop and InDesign. They will work with clients in producing real world projects.

Transfer Curriculum Goal(s): none

CART 2112 Computer Graphics II

Credits: 3

Prerequisite: CART 1110, CART 1112, CART 1114, CART 2118

Co-Requisite: none

In this course students will learn advanced skills using Illustrator, Photoshop and InDesign. They will work with clients in producing real world projects. Students will develop interactive presentations for comprehensive solutions to all mediums of advertising. A digital portfolio of all of their work will be created.

Transfer Curriculum Goal(s): none

CART 2113 Art Direction

Credits: 4

Prerequisite: CART 2100

Co-Requisite: none

The purpose of this course is to provide insight on working as an art director demonstrating advanced concept formulations as well as working under the direction of an art director to create requested requirements. These techniques will be applied to large graphic design projects where students will work as teams to create marketing campaigns and act as an art director. Students will also work directly with a photographer to art direct a photo shoot. Effective communication and learned skills will be demonstrated.

Transfer Curriculum Goal(s): none

CART 2114 3D Modeling and Design

Credits: 3

Prerequisite: CART 1110

Co-Requisite: none

Students will learn the process of building 3D projects from concept to creation. They will learn about modeling essentials, lighting, and 3d characters. Rendering stills, and animations or to combine with other programs for complex video solutions.

Transfer Curriculum Goal(s): none

CART 2118 Advanced Website

Construction

Credits: 2

Prerequisite: none

Co-Requisite: none

Students will learn Adobe Flash for designing interactive presentations, web sites, creating Flash animations and generating multimedia sites using video and audio.

Transfer Curriculum Goal(s): none

CART 2120 Packaging

Credits: 3

Prerequisite: none

Co-Requisite: none

The purpose of this course is to provide an understanding in designing in

three dimensions for a wide variety of products and preparing the design for different target markets. Students will also organize and plan a new product launch and create materials to aid the success of the launch. It is recommended that students enroll in CART 1102 prior to enrollment in CART 2120. Transfer Curriculum Goal(s): none

CART 2124 Portfolio Production

Credits: 2

Prerequisite: none

Co-Requisite: none

The purpose of this course is to assemble and demonstrate design understanding by producing a portfolio and a resume to showcase skills. The portfolio may take a variety of forms from two dimensional to digital. The student will be required to participate in professional portfolio reviews. Planning for the graphic design business and job hunting will also be discussed. It is recommended that students enroll in CART 2100 prior to enrollment in CART 2120.

Transfer Curriculum Goal(s): none

CART 2128 Video Editing

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will learn to compose and edit digital videos. Using Final Cut Pro, students will edit video digitally and mix audio to create commercials, music videos broadcasting and short movies.

Transfer Curriculum Goal(s): none

CART 2310 3D Animation

Credits: 3

Prerequisite: CART 2114

Co-Requisite: none

This course continues working in three dimension and motion. Students will enhance 3D animation to successfully complete short stories video intros.

Transfer Curriculum Goal(s): none

CART 2350 Internship

Credits: 1-5

Prerequisite: none

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

CART 2399 Special Topics

Credits: 1-4

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Communication Art & Design. On demand.

Transfer Curriculum Goal(s): none

Computer Technology

COMP 1101 Computer Fundamentals

Credits: 3

Prerequisite: none

Co-Requisite: none

This is a beginning course for students who want to understand the basics of computer hardware, the operating system, office applications and the internet, and how they integrate together in the computer world. Topics and skills will include using and changing the Windows desktop, downloading software from the internet, the file hierarchy and saving files, using the basic functions of word processing, spreadsheet, database and presentation software to create and format documents, understanding the basics of a network for the office and across the internet, the use of email clients to send messages, how to attach documents and organize tasks, connecting to and using the internet, searching the web effectively, working with sounds and picture files, and understanding privacy issues and how to prevent identity theft when using computers and the internet.

Transfer Curriculum Goal(s): none

COMP 1103 Computer Basics-Operating Systems

Credits: 1

Prerequisite: none

Co-Requisite: none

This course is a slow moving and a step by step procedure in delivery of the material. It will provide basic skills including functions of the following: how a computer works, internet security, password security, applications, functions of the toolbar, windows desktop, file structure, and saving documents. The proper use of email and its functions will be explored along with the features of a particular email system. Utilization of the help and support feature and its functions within the operating system and email system will be addressed.

Transfer Curriculum Goal(s): none

COMP 1104 Computer Basics-Applications

Credits: 1

Prerequisite: none

Co-Requisite: none

This course is a slow moving and a step by step procedure in delivery of the material. Course will provide basic skills including functions of the following: how a computer works, internet security, password security, applications, functions of the toolbar, windows desktop, file structure, saving, formatting and managing word

documents, resume writing, editing text documents and font attributes. Organizational skills and managing a file system will be explored and implemented. Utilization of help and support feature within the applications used will be explored.

Transfer Curriculum Goal(s): none

COMP 1109 Introduction to Operating Systems

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the basics of how to get the most out of using the Microsoft Windows operating system. Topics include identifying minimal hardware requirements needed to run Windows; customizing the desktop environment; file management; maintaining hard drives and other removable storage media; multitasking; the Windows applications of WordPad, Paint, Notepad and Windows Live; and sharing hard drives and printers in a small network environment. Career Preparation: The studies in this course will help students begin preparation for careers in information technology such as Computer Support Specialist and Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, and Business Analyst. Certification Preparation: Optional. Certiport: IC3 - Computing Fundamentals. Transfer Curriculum Goal(s): none

COMP 1120 Introduction to Computer Applications

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the computer application software most used in this business and education worlds, the Microsoft Office suite of Word, Excel, Access, PowerPoint and Outlook. Some of the topics to be covered include: formatting Word documents, creating research papers and resumes using wizards and templates, creating Web pages with Word, using Excel to create worksheets and embedded charts, using Excel formulas and functions, creating what-if analysis, creating static and dynamic web pages using Excel, creating and querying an Access database, creating a PowerPoint presentation with a unified design, pictures and sound elements, and using Outlook to send and view mail, manage appointments and contacts. Career Preparation: Any business career that uses the Microsoft Office suite applications, including, but not limited to: Computer Support Specialist, Network Administrator,

Network Engineer, Systems Analyst, Systems Engineer, and Business Analyst. Certification Preparation: Optional. Certiport: IC3 - Key Applications.

Transfer Curriculum Goal(s): none

COMP 1121 Advanced Computer Applications

Credits: 3

Prerequisite: COMP 1120

Co-Requisite: none

This course covers some of the advanced features and formatting options available in the Microsoft Office suite applications of Word, Excel, Access, and PowerPoint. Topics include: creating tables, charts and watermarks in Word documents, generating form letters, mailing labels and envelopes, creating newsletters, using the financial functions available in Excel to create data tables and amortization schedules, creating templates, creating reports from an Access database, creating Access forms and subforms, creating macros and using wizards, creating a switchboard manager in Access, using and modifying visual and sound elements in PowerPoint presentations, delivering PowerPoint presentations and collaborating in workgroups. Integration between the Office suite applications will be emphasized. Career Preparation: Any business career that uses the Microsoft Office suite applications, including, but not limited to: Computer Support Specialist, Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, and Business Analyst. Certification Preparation: Optional. Microsoft Office User Specialist, Word Core and Excel Core. Transfer Curriculum Goal(s): none

COMP 1131 Microsoft Word Comprehensive

Credits: 4

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced skill sets using the Microsoft Word 2010 software application. Students will use Microsoft Word 2010 to create, format, and edit documents, research papers with citations and references, business letters with a letterhead and tables, and documents with a title page, tables, and watermarks. Students will use templates to create a resume. Students will generate form letters, implement mail merge functions and create mailing labels, and directories. Students will create advanced newsletters with multiple desktop publishing features and deploy document collaboration and integration tools. Advanced topics in-

clude creating a table of contents with an index, creating a template for an online form, and working with macros, document security, and XML. Students will learn project planning guidelines, how to publish Office 2010 Web pages online, saving to the Web using Windows Live SkyDrive, and creating APA research papers. Students need to be efficient with operating system functions as this course focuses on the application itself with the assumption that students have effective operating system functional skills. Career Preparation: The studies in this course will help students prepare for careers in Business, Management, and general use of computer applications for nearly all organizations. It will also prepare students for careers in Computer Support, Information Technology, and Help Desk/Computer Repair Technician. Certification Preparation: Optional. Certiport: MOS: Microsoft Office Word 2010 Exam 77-881 and MOS: Microsoft Office Word 2010 Expert Exam 77-887. Prerequisite Advisory: Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course.

Transfer Curriculum Goal(s): none

COMP 1132 Microsoft Access Comprehensive

Credits: 4

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced skill sets using the Microsoft Access 2010 software application. Students will use Microsoft Access 2010 to create databases and database objects while learning introductory database table structure. Students will learn the concepts for querying a database, maintaining a database and to create reports, forms, multiple table forms and advanced report techniques. Students will learn to use SQL and advanced form techniques. Students will write macros, create navigation forms, PivotTables, and PivotCharts. Students will learn how to design a database and then administer a database system. This course covers the skill sets and exam objectives for the Microsoft Office Specialist (MOS) 77-885 certification exam.

Career Preparation: The studies in this course will help students prepare for careers in Business, Management, and general use of computer applications for nearly all organizations. It will also prepare students for careers in Computer Support, Information Technology, Database Management, and Help Desk/Computer Repair Technician. Certification Preparation: Optional. Certiport: MOS: Microsoft Office Access 2010 Exam 77-885. Prerequisite advisory: Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course. Transfer Curriculum Goal(s): none

COMP 1133 Microsoft PowerPoint Comprehensive

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced skill sets using the Microsoft PowerPoint 2010 software application. Students will learn use Microsoft PowerPoint 2010 to create and edit a basic presentation, enhance a presentation with pictures and shapes, reuse a presentation and add multimedia. Students will work with information graphics, deliver and collaborate on presentations, add emphasis with text boxes, and create self-running presentations containing animation. Students will enhance presentations with hyperlinks and action buttons, develop presentations from an outline and create a photo album presentation with shapes. Student will create and customize a template and handouts using masters. Students will learn project planning guidelines, how to publish Office 2010 Web pages online, and saving presentations to the Web using Windows Live SkyDrive. This course covers the skill sets and exam objectives for the Microsoft Office Specialist (MOS) 77-883 certification exam. Career Preparation: The studies in this course will help students prepare for careers in Business, Management, and general use of computer applications for nearly all organizations. It will also prepare students for careers in Computer Support, Information Technology, and Help Desk/Computer Repair Technician. Certification Preparation: Optional. Certiport: MOS: Microsoft

Office PowerPoint 2010 Exam 77-883. Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course.

Transfer Curriculum Goal(s): none

COMP 1134 Microsoft Outlook Comprehensive

Credits: 1

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced skill sets using the Microsoft Outlook 2010 communication software application. The course learning objectives are centered on the Microsoft Office Specialist (MOS) 77-884 certification exam objectives. Students will learn use Microsoft Outlook 2010 to format message content by using character and paragraph formatting, use graphic elements such as charts and tables, and create contact records, tasks, and appointments from incoming messages. Students will create contact groups, schedule meetings, and share schedules to facilitate communication with other Outlook users. Career Preparation: The studies in this course will help students prepare for careers in Business, Management, and general use of computer applications for nearly all organizations. It will also prepare students for careers in Computer Support, Information Technology, and Help Desk/Computer Repair Technician. Certification Preparation: Optional. Certiport: MOS: Microsoft Office Outlook 2010 Exam 77-884. Prerequisite advisory: Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course. Transfer Curriculum Goal(s): none

COMP 1135 Microsoft Excel Comprehensive

Credits: 4

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced skill sets using the Microsoft Excel 2010 software application. The course learning objectives are centered on the Microsoft Office Specialist (MOS) 77-882 and 77-888 certification exam objectives. Students will use Microsoft Excel 2010 to create charts, create analytical and financial reports, optimize data entry, create a family budget, format numerical (financial, statistical, etc.) reports, create forms, create graphing analyses, process data using what-if analyses, design reports, and create trending data. Students will learn to be proficient with advanced formulas, functions, and data analysis tools. Students will also learn to manipulate data for analysis, presentation, and collaboration. Students will learn to manipulate Excel options to customize their environment to meet varying organizational needs and enhance their productivity. Career Preparation: The studies in this course will help students prepare for careers in Business, Management, and general use of computer applications for nearly all organizations. It will also prepare students for careers in Computer Support, Information Technology, and Help Desk/Computer Repair Technician. Certification Preparation: Optional. Certiport: MOS: Microsoft Office Excel 2010 Exam 77-882 and MOS: Microsoft Office Excel 2010 Expert Exam 77-888. Prerequisite advisory: Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course. Transfer Curriculum Goal(s): none

COMP 1138 iPad Technologies

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will help students maximize the power of their iPad and master all the versatile and fun features while using their iPad. Topics include how to configure settings, access the Internet, use Mail and Safari, and download music, movies, TV shows, ebooks, apps, games, and more. Students will get tips for taking photos and video with the camera, use FaceTime for video chatting, navigate with

GPS, and connect to social networks. Students will set up, customize, sync, and back up their iPad and choose a data plan for their iPad. Students will configure mail and integrate with various email accounts and connect with social networks. A current iPad is required for this course.

Transfer Curriculum Goal(s): none

COMP 1140 Survey of Web-Based Tools

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on using current technology tools for collaboration, entertainment, professional development, system security, and networking on the Internet. Innovative technologies that will be explored include many of the following: social networking sites (MySpace, Friendster, Facebook, LinkedIn), virtual technologies (virtual environments, 3D chat, avatars, and online meetings), social network integration tools (RSS feeds, wikis, blogs, mashups, podcasts), voice and video collaboration tools and file sharing services (VoIP, TokBox, Skype, Twitter, Windows Live Mesh, Live Meeting, Animoto), security and personal safety (firewall technology, anti-spyware, anti-virus, anti-spam, phishing and identity theft, netiquette and ethnics), marketing and business tools (Flickr and E-bay), Web 2.0 application design strategies, and career opportunities on today's Web.

Transfer Curriculum Goal(s): none

COMP 1204 Computer Repair I - A+ Hardware

Credits: 4

Prerequisite: none

Co-Requisite: none

This course addresses many of the objectives of the CompTIA A+ Essentials (220-701) and A+ PC Technician (220-702) Certification Exams, and introduces students to the operation, diagnosis, troubleshooting, and simple maintenance of microcomputer components. Topics include hardware compatibility, system architecture, memory, storage, expansion devices, peripherals, customer service, safety, and preventative maintenance. Career Preparation: The studies in this course will help students prepare for careers such as Computer Support Specialist, PC Repair Technician, Network Administrator, Network Engineer, Systems Analyst, and Systems Engineer. Certification Preparation: Optional. CompTIA A+ Essentials (220-701) and A+ PC Technician (220-702). Students are expected to know how to use a

current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course.

Transfer Curriculum Goal(s): none

COMP 1206 Computer Repair II

Credits: 3

Prerequisite: COMP 1204

Co-Requisite: none

This course is the sequel to COMP 1204 and addresses many of the objectives of the CompTIA A+ Essentials (220-701) and A+ PC Technician (220-702) Certification Exams, introducing students to the operation, diagnosis, troubleshooting, and maintenance of microcomputer components. Topics include complete system assembly, maintenance, operating system architecture, installation, maintenance and troubleshooting, simple networking, viruses, data backup, and disaster recovery. Career Preparation: The studies in this course will help students prepare for careers such as Computer Support Specialist, PC Repair Technician, Network Administrator, Network Engineer, Systems Analyst, and Systems Engineer. Certification Preparation: Optional. CompTIA A+ Essentials (220-701) and A+ PC Technician (220-702). Was previously COMP 2206.

Transfer Curriculum Goal(s): none

COMP 1230 Network Essentials

Credits: 4

Prerequisite: COMP 1109

Co-Requisite: none

This course is one of a series of Microsoft Server System Administration and Engineering courses that help prepare students for the Microsoft Certification. This course provides students with the knowledge and skills necessary to plan and design a TCP/IP physical and logical network, plan and troubleshoot a routing strategy, plan a Dynamic Host Configuration Protocol (DHCP) strategy, optimize and troubleshoot DHCP, plan a Domain Name System (DNS) strategy, optimize and troubleshoot DNS, plan and design Deploying IIS and Active Directory Certificate Services, and network access. Career Preparation: The studies in this course will help students prepare for careers in Networking such as Network Administrator, Network Engineer, Systems Analyst, LAN Ad-

ministrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional. Microsoft Certified IT Professional (MCITP) certification 70-646.

Transfer Curriculum Goal(s): none

COMP 1253 Client Operating System Administration

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is one of a series of Microsoft System Administration and Engineering courses that help prepare students for the Microsoft Certified Systems Administrator - MCSA - and Microsoft Certified Systems Engineer - MCSE - industry certification. This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows XP Professional on stand-alone and client computers that are part of a workgroup or domain. This course focuses on installation, configuration, and management of client computers in a network environment and the skills to administer upgrades, migration paths, disk structure, permissions, sharing, and other security issues related to file systems. Career Preparation: The studies in this course will help students prepare for careers in Networking such as MCSE, MCSA, Network Administrator, Network Engineer, Systems Analyst, LAN Administrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional. Microsoft 70-620270 Transfer Curriculum Goal(s): none

COMP 1305 Exploring Digital World Technologies

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on basic through advanced computer concepts with an emphasis on both the personal computer and enterprise computing. Topics include hardware, application and system software, the Internet and World Wide Web, communications, e-commerce, societal issues, database management, systems analysis and design, programming, information systems, career opportunities, certifications in the computer field, and computer trends. Students will finish the course with a solid understanding of computers, how to use computers, and how to access information on the Web. This course presents the most-up-to-date technology in an ever-changing discipline, gives students an in-depth understanding of why computers are essential compo-

nents in business and society, frames the fundamentals of computers and computer nomenclature, particularly with respect to personal computer hardware and software, and the Web. Students will learn the latest trends in technology and computer concepts and how these topics are integrated into their daily lives. This course will assist students in exploring a career centered on current and emerging technologies.

Transfer Curriculum Goal(s): none

COMP 1315 Computer Literacy and E-learning

Credits: 3

Prerequisite: none

Co-Requisite: none

This course begins with understanding and effectively using the CLC E-learning components including D2L, Novell Netmail, and MnSCU e-services. The course then focuses on computing fundamentals, key applications, and living online - the three standard skills sets categories of the IC3 computer literacy program. The learning domains included in this course are Computer Hardware, Peripherals and Troubleshooting, Computer Software, Using an Operating System, Common Program Functions Word Processing Functions, Spreadsheet Features, Communication with Presentation Software, Communication Networks and the Internet, Electronic Communication and Collaboration, using the Internet and the World Wide Web, and The Impact of Computing and the Internet on Society. This course will help students prepare for the IC3 certification exam. Career Preparation: Diverse - All business and organization careers using current computer technologies. Certification Preparation: IC3

Transfer Curriculum Goal(s): none

COMP 1398 Topics in Computer Technology

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will cover selected topics of interest in Computer Technology. These topics could include a variety of current computer technology issues, releases, platforms, security, networking or others. Career Preparation: Information Technology, Computer Technology. Certification Preparation: None, unless specified in topic material.

Transfer Curriculum Goal(s): none

COMP 2107 Supporting Client Operating Systems

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides students who are new to Microsoft client operating systems with the knowledge and skills necessary to troubleshoot basic problems end users will face while running Microsoft client operating systems in an active directory network environment, or in a workgroup environment. This is an introductory level computer-support course designed to provide an overview of operating system concepts and how to troubleshoot the current version of Microsoft client operating systems. This is the first course in the Microsoft Certified IT Professional (MCITP) certification. This course is intended for new entrants and career changers new to the IT industry who have experience using Microsoft Office and have basic Microsoft Windows navigation skills. This course is also intended for a current call center technician with six months experience looking to validate and update their support skills. Career Preparation: The studies in this course will help students prepare for careers in computer support, client support, and system support such as MCDST, systems analyst, support technician, support analyst, and help desk administrator. Certification Preparation: Optional. Microsoft 70-620. Students are expected to know how to use a current Windows operating system including navigation, saving files, file management/hierarchy structure, compression, extraction, installation of programs, setting up user accounts and administrative operating system tasks. Students without this experience should take COMP 1109 Introduction to Operating Systems either before they take this course or concurrently while they are taking this course.

Transfer Curriculum Goal(s): none

COMP 2111 Security Essentials

Credits: 4

Prerequisite: none

Co-Requisite: none

This course addresses the objectives of CompTIA's Security+ Certification and will help prepare students to pass the Security+ Certification Exam. This course is designed to provide students with a broad-based knowledge of network security and assist them in preparing for a career in information technology or for further study in specialized security fields. Subjects covered will include, but not be limited to, the following: authentication, security attacks, malicious code, remote access, e-mail, web security, direct and file transfer services, hacking and anti-hacking utilities, wireless and instant

messaging devices, media, network security topologies, intrusion detection, security baselines, cryptography, physical security, disaster recovery, and computer forensics. Career Preparation: The studies in this course will help students prepare for careers such as Security Administrator, Network Administrator, Network Engineer, Systems Analyst, and Systems Engineer. Certification Preparation: Optional. CompTIA Security+ SYO-201.

Transfer Curriculum Goal(s): none

COMP 2113 Advanced Operating Systems: Command Line Administration

Credits: 3

Prerequisite: COMP 1230 and COMP 1253

Co-Requisite: none

This course focuses on the concepts of the command line interface using the Command Prompt window, referred to as the MS DOS prompt window in earlier versions of Windows. Topics covered include commands, syntax, switches, attributes, pipes, filters, redirection, advanced batch files, optimizing performance and troubleshooting using batch sequence processing, and how to use simple Internet related internal commands from the command line. Both internal and external commands will be studied and applied in the command interpreter. Students will create batch files and learn how to apply these utilities in an operating system and network operating system environment. Students will build maintenance utility and automation programs using the command line interpreter. Career Preparation: The studies in this course will help students prepare for careers in information technology such as Computer Support Specialist, Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, Business Analyst, Computer Support, Information Technology, and Help Desk/Computer Repair Technician.

Transfer Curriculum Goal(s): none

COMP 2118 Server Administration

Credits: 4

Prerequisite: COMP 1230 & COMP 1253

Co-Requisite: none

This course is one of a series of Microsoft Server System Administration and Engineering courses that help prepare students for the Microsoft Certification. This course provides students with the knowledge and skills necessary to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server environment. These tasks

include managing user, computer, and group accounts; managing access to network resources; managing printers; managing an organizational unit in a network based on Active Directory directory service; and implementing Group Policy to manage users and computers. Career Preparation: The studies in this course will help students prepare for careers in Networking such as Network Administrator, Network Engineer, Systems Analyst, LAN Administrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional Microsoft Certified IT Professional (MCITP) certification 70-640. Was previously COMP 1254.

Transfer Curriculum Goal(s): none

COMP 2119 Network Infrastructure Credits: 4

Prerequisite: COMP 2118

Co-Requisite: none

This course is one of a series of Microsoft Server System Administration and Engineering courses that help prepare students for the Microsoft Certification. This course provides students with the knowledge and skills necessary to install, configure, maintain, and safeguard data in a Microsoft Windows Server environment. These tasks include managing, configuring, administering, and installing the Dynamic Host Configuration Protocol, Domain Name System, configuring File Services, Printers, Network Policy and Access Services, and Securing a Windows Environment. Career Preparation: The studies in this course will help students prepare for careers in Networking such as Network Administrator, Network Engineer, Systems Analyst, LAN Administrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional Microsoft Certified IT Professional (MCITP) certification 70-642. Was previously COMP 1255.

Transfer Curriculum Goal(s): none

COMP 2120 Network Planning and Design Credits: 4

Prerequisite: COMP 2119

Co-Requisite: none

This course is one of a series of Microsoft Server System Administration and Engineering courses that help prepare students for the Microsoft Certification. This course provides students with the knowledge and skills necessary to plan and design a TCP/IP physical and logical network, plan and troubleshoot a routing strategy, plan a Dynamic Host Configuration Protocol (DHCP) strategy, optimize and trou-

bleshoot DHCP, plan a Domain Name System (DNS) strategy, optimize and troubleshoot DNS, plan and design Deploying IIS and Active Directory Certificate Services, and network access. Career Preparation: The studies in this course will help students prepare for careers in Networking such as Network Administrator, Network Engineer, Systems Analyst, LAN Administrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional Microsoft Certified IT Professional (MCITP) certification 70-646.

Transfer Curriculum Goal(s): none

COMP 2121 Directory Services Infrastructure Credits: 4

Prerequisite: COMP 2120

Co-Requisite: none

This course is the final course in a series of Microsoft Server System Administration and Engineering courses that help prepare students for the Microsoft Certification. This course is a capstone course which provides students with the knowledge and skills to successfully plan, design, implement, configure, and troubleshoot a Microsoft Windows Server Active Directory directory service infrastructure. The course focuses on a review of all previous Microsoft Server courses, including Business Continuity. Windows Server directory service environment, including forest and domain structure, Domain Name System (DNS), site topology and replication, organizational unit structure and delegation of administration, Group Policy, and user, group, and computer account strategies. Career Preparation: The studies in this course will help students prepare for careers in Networking such as Network Administrator, Network Engineer, Systems Analyst, LAN Administrator, WAN Administrator and Systems Engineer. Certification Preparation: Optional Microsoft Certified IT Professional (MCITP) certification 70-647.

Transfer Curriculum Goal(s): none

COMP 2126 Wireless Networking Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on the evolving need of home and office wireless technologies and mastering wireless local area networks. The course covers aspects of wireless networks with a particular emphasis on wireless network security and design. Course material includes implementing practical

hardware, software and network configurations for wireless networking. This course will address the objectives of the CWNA (Certified Wireless Network Administrator) industry certification. The studies in this course will help students prepare for careers such as Security Administrator, Network Administrator, Network Engineer, Systems Analyst, Support Technician, and Systems Engineer. Certification Preparation: Planet3 Wireless CWNA Transfer Curriculum Goal(s): none

COMP 2127 Hardware/Software Evaluation Credits: 2

Prerequisite: COMP 1109

Co-Requisite: none

This course focuses on the evaluation of emerging product technologies. The content will vary with new release hardware components and software betas. Evaluation criteria will be established for the product evaluation and students will work through a systematic evaluation process. Career Preparation: The studies in this course will help students prepare for careers such as Security Administrator, Network Administrator, Network Engineer, Systems Analyst, and Systems Engineer.

Transfer Curriculum Goal(s): none

COMP 2160 Ethics in Information Technology Credits: 2

Prerequisite: COMP 1109

Co-Requisite: none

This course will introduce students to ethical topics and situations that exist in, and are possibly unique to, information technology. Actual case studies will be explored, and students will earn practical advice on how to deal with these issues if they arise. Topics covered will include a definition of ethics, ethics for IT professionals and users, computer crime, internet crime, privacy laws, constitutional freedoms, intellectual property, software development, employment issues, and industry codes of ethics. Career Preparation: The studies in this course will help students prepare for careers such as Computer Support Specialist, PC Repair Technician, Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, IS Manager and CIO. Was previously COMP 1160.

Transfer Curriculum Goal(s): none

COMP 2202 Computer User Support Credits: 3

Prerequisite: COMP 1204

Co-Requisite: none

This course provides an overview

of microcomputer user support responsibilities. This course provides students with a comprehensive understanding of the helpdesk environment and the knowledge, skills, and abilities necessary to work in the user support industry. Students will learn problem-solving, communication skills, working individually and in teams. Troubleshooting strategies and tools will be analyzed and used. Studies include historical changes in computer use, end-user application support, help systems, communication strategies, customer satisfaction techniques, evaluation techniques, industry and organizational standards, needs assessments and documentation. Career Preparation: The studies in this course will help students prepare for careers in technology support such as Computer Support Specialist, Help Desk Technician, and Information Technology Specialist. Was previously COMP 1202.

Transfer Curriculum Goal(s): none

COMP 2213 Computer Careers Internship

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

This internship provides students with on-the-job experience in the student's computer career major. A competency-based training plan will be developed for each student and the employer. This is a cooperative program between Central Lakes College and a participating organization to allow the student to work in an on-the-job situation. Career Preparation: The studies in this course will help students prepare for careers in Computer/Information Technology such as Computer Support Specialist, Network Administrator, Network Engineer, Systems Analyst, Business Analyst, Linux Administrator, Help Desk Technician, MCSE, MCSA, LAN Administrator, WAN Administrator depending on the major of study. Certification Preparation: None. Transfer Curriculum Goal(s): none

COMP 2214 Help Desk Internship I

Credits: 5

Prerequisite: instructor's consent

Co-Requisite: none

This internship provides students with on-the-job experience in a computer user support field. A competency-based training plan will be developed for each student and the employer. This is a cooperative program between Central Lakes College and a participating organization to allow the student to work in an on-the-job

setting situation. Career Preparation: The studies in this course will help students prepare for careers in Computer/Information Technology such as Computer Support Specialist and Help Desk Technician. Certification Preparation: None.

Transfer Curriculum Goal(s): none

COMP 2216 Help Desk Internship II

Credits: 5

Prerequisite: COMP 2214

Co-Requisite: none

This is a continuing internship providing students with additional on-the-job experience in the student's computer career major. A competency-based training plan will be developed for each student and the employer. This is a cooperative program between Central Lakes College and a participating organization to allow the student to work in an on-the-job situation. The studies in this course will help students prepare for careers in Computer/Information Technology such as Computer Support Specialist, Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, and Business Analyst, Linux Administrator, Help Desk Technician, LAN Administrator, WAN Administrator depending on the major of study. Transfer Curriculum Goal(s): none

COMP 2220 Introduction to Computer Programming

Credits: 4

Prerequisite: COMP 1109

Co-Requisite: none

This course is an introduction to the techniques used in structured programming using current programming languages. Students will learn how to design and code their own programs as well as testing and debugging techniques. The students are expected to develop projects using object-oriented design methods. Career Preparation: The studies in this course will help students begin preparation for careers in information technology such as Computer Support Specialist and Network Administrator, Network Engineer, Systems Analyst, Systems Engineer and Business Analyst. Transfer Curriculum Goal(s): none

COMP 2222 Introduction to Visual Basic and Scripting

Credits: 3

Prerequisite: COMP 1109

Co-Requisite: none

This course provides an overview of Visual Basic programming and scripting and entry-level programming fundamentals including variables, controls, data types and structures,

emphasizing design and development considerations for Windows based application programs and operating systems. Students will write Visual Basic code to perform operations using arrays, manipulating strings, and performing file input and output functions. Topics include: the Visual Basic and scripting development environment, intrinsic controls, data types, control structures, procedures and functions, arrays, user-defined types, file handling, Visual Basic as an object oriented language, and writing scripts for systems calls and command line arguments. Career Preparation: The studies in this course will help students begin preparation for careers in information technology such as Computer Support Specialist and Network Administrator, Network Engineer, Systems Analyst, Systems Engineer and Business Analyst.

Transfer Curriculum Goal(s): none

COMP 2314 Introduction to Project Manager

Credits: 3

Prerequisite: none

Co-Requisite: none

This course addresses the objectives covered by the CompTIA IT Project+ Certification Exam, and is designed to introduce students to project management, with an emphasis on IT project management. Topics include project initiation and scope definition, project planning, project execution, control and coordination, and project closure, acceptance, and support. Career Preparation: The studies in this course will help students prepare for careers in Project Management such as Computer Support Specialist, Network Administrator, Network Engineer, Systems Analyst, Systems Engineer, Business Analyst, IT Project Manager, and Senior IT Project Manager. Certification Preparation: Optional. CompTIA Project+. Transfer Curriculum Goal(s): none

Criminal Justice

CRJU 1101 Criminal Justice

Credits: 3

Prerequisite: none

Co-Requisite: none

This is an introduction into the American Criminal Justice System. The course will cover police, court, and correctional facilities, and given an overview of how our criminal justice system works. Discussion on various topics will analyze procedures and cases that made our laws what they are today.

Transfer Curriculum Goal(s): none

CRJU 1104 Juvenile Justice

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will cover the study of juvenile delinquency, the theories of causation, and the methods of corrections. It will also examine the correction systems which are offered for juvenile offenders. This class will cover the mandatory Minnesota Post Board categories that are required by the State of Minnesota licensing examination.

Transfer Curriculum Goal(s): none

CRJU 1106 Corrections and Probation**Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will examine the historical and contemporary correctional theories and programs with emphasis on the current organizational structure. Probation, Parole, and alternatives to incarceration will be explored.

Transfer Curriculum Goal(s): none

CRJU 1108 Community Corrections**Credits: 3**

Prerequisite: none

Co-Requisite: none

This course addresses the concepts and practices of community corrections. The specific content includes halfway house program activities, restitution projects and program coordination, work release activities, court diversion processes and programs, truancy tracking programs, and community outreach initiatives.

Transfer Curriculum Goal(s): none

CRJU 1109 Report Writing in Law Enforcement**Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will teach the students a professional approach to law enforcement report writing procedures required by police officers. Spelling, grammar, and punctuation will be mandatory in this course. The focus will be on documenting the chain of evidence and chronological events applicable to criminal investigations. Application of oral interviewing and interrogation skills will be included. Forms required by law enforcement personnel will be covered in class along with the use of a computer lab classroom.

Transfer Curriculum Goal(s): none

CRJU 2101 Criminal Law**Credits: 3**

Prerequisite: none

Co-Requisite: none

This is a course in substantive law, including the elements of major crimes and their possible legal defenses. This course will also familiarize students with the Minnesota Criminal Statutes and help prepare students by covering a large portion of the Minnesota POST objectives.

Transfer Curriculum Goal(s): none

CRJU 2102 Criminal Procedures**Credits: 4**

Prerequisite: CRJU 1101 or instructor's consent

Co-Requisite: none

This course covers the study of constitutional law and criminal procedures utilizing the opinions of the U.S. Supreme Court and the Minnesota Rules for Criminal procedures. Emphasis is placed on the constitutional guidelines for law enforcement, rules of arrest, search and seizure, and the Minnesota Rules of Procedures.

Transfer Curriculum Goal(s): none

CRJU 2108 Criminal Investigations**Credits: 3**

Prerequisite: none

Co-Requisite: none

This is a course in substantive law, including the elements of major crimes and their possible legal defenses. This course will also familiarize students with the Minnesota Criminal Statutes and help prepare students by covering a large portion of the Minnesota POST objectives.

Transfer Curriculum Goal(s): none

CRJU 2110 Topics in Criminal Justice**Credits: 1-3**

Prerequisite: none

Co-Requisite: none

This course will address those issues currently under public scrutiny. These would likely include, but not be limited to, deadly force and use of force, capital punishment, racism in the system, sexism within the justice system, police corruption, abuse of authority throughout the system, the code of silence found within the system, and other relevant topics of timely nature.

Transfer Curriculum Goal(s): none

CRJU 2112 Ballistic and Firearms Identification**Credits: 4**

Prerequisite: none

Co-Requisite: none

This course is a study of internal and external ballistics and their relationships to criminal investigations. Included in the coursework will be comprehensive analysis of projectile

striation operational signatures, projectile impact signatures, and gunshot powder residue analysis, both spectrographically and reproductions. Students will be required to complete an investigatory process that includes testimony in mock court.

Transfer Curriculum Goal(s): none

CRJU 2114 Traffic Law**Credits: 3**

Prerequisite: none

Co-Requisite: none

This course covers the Minnesota Traffic Statutes and how they are applied, interpreted, and enforced. Vehicle registration, vehicle insurance and safety responsibility acts, drivers license laws, rules and regulations as they relate to snowmobiles and all-terrain vehicles, motorcycles and other motor vehicles will be covered.

Transfer Curriculum Goal(s): none

CRJU 2116 Science of Fingerprints**Credits: 4**

Prerequisite: none

Co-Requisite: none

This course is a study of fingerprints as it relates to criminal investigations and the identification of suspects and victims of crimes. The student will learn the Henry system of obtaining rolled impressions and the techniques of computerization in locating and filing unknown latent prints. Dusting, lifting, and photographing latent prints in various mediums will also be examined. Laser detection and ultraviolet location of latent prints will be presented in class.

Transfer Curriculum Goal(s): none

CRJU 2118 Criminal Justice Photography**Credits: 4**

Prerequisite: none

Co-Requisite: none

A primary facet of criminal investigation is founded in recording of evidence and the crime scene for trial via still and video photography. This course of study will take the student through various investigative endeavors which create photographic tasks similar to actual crime scenes and criminal investigations which require photographic documentation.

Transfer Curriculum Goal(s): none

CRJU 2124 General Evidence and Identification Preparation**Credits: 4**

Prerequisite: none

Co-Requisite: none

A substantial component of criminal investigations is found in crime scene reconstruction. This course enables

the student to undertake a physical examination of various forms of evidence likely encountered in a variety of crime scene investigations. Plaster and plastic reproductions of latent tracks, number restoration, crime scene sketching, and the collection and preservation of physical evidence will be examined. Related photography will also be a part of the course. Transfer Curriculum Goal(s): none

CRJU 2135 Internship

Credits: 1-8

Prerequisite: instructor's permission

Co-Requisite: none

This is a practical learning experience in criminal justice in the area of the student's interest. This course is usually scheduled after the student has completed one year of course work. Coordinator and agency approval is required. Students are not guaranteed an internship.

Transfer Curriculum Goal(s): none

CRJU 2140 Law Enforcement and Behavioral Science

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines the dark side of law enforcement. The student will explore corruption, deviancy, and criminality found within police departments nationally, and discuss how it impacts upon relations within poor and minority citizens.

Transfer Curriculum Goal(s): none

CRJU 2150 Constitutional Law and the Justice System

Credits: 3

Prerequisite: none

Co-Requisite: none

This course gives students an appreciation and understanding of the United States Constitution and its importance within our democracy. The historical basis and development of constitutional concepts will be examined. Specific attention will be paid to constitutional limitations upon government authority over private citizens. In addition to stressing amendments with the Bill of Rights, the course will look at the 14th Amendment. We will address the Minnesota POST Board learning objectives relating to constitutional law.

Transfer Curriculum Goal(s): none

CRJU 2311 Basic Firearms

Credits: 1

Prerequisite: CRJU students only

Co-Requisite: none

This course will cover the basic fun-

damentals of handguns and shotguns. Nomenclature of firearms will be covered, along with shooting. This is a preparation for students who are unfamiliar with firearms, so that they may successfully complete the skills component to be a licensed police officer.

Transfer Curriculum Goal(s): none

CRJU 2399 Seminar in Police Administration

Credits: 3

Prerequisite: none

Co-Requisite: none

This course takes a broad look at management in law enforcement and the challenges that comes with being a supervisor. Basic management skills, personal skills, managing problems, hiring personnel, budgeting, and deploying law enforcement resources to improve productivity will be discussed.

Transfer Curriculum Goal(s): none

Dental Assistant

DENT 1106 Dental Orientation and Anatomy

Credits: 2

Prerequisite: none

Co-Requisite: none

This course will focus on correct pronunciation, spelling and the meaning of terms used in the dental vocabulary. The terminology presented in this course will be utilized by the student throughout the Dental Assisting program. This course will focus on identifying structures of the head and neck and describe their functions to include the skull, face, mandible, hard palate, muscles of mastication, sinuses, oral cavity, salivary glands, nerves and blood supply. This course will focus on the development of the tissues and organs found in the oral cavity, the structural components of the hard and soft tissues and the detailed anatomy of the adult and primary dentition.

Transfer Curriculum Goal(s): none

DENT 1114 Pathology, Pharmacology, Law and Emergencies

Credits: 3

Prerequisite: DENT 1106

Co-Requisite: none

This course is designed to provide the student with a knowledge of pathology, the body's defense, healing mechanisms, and diseases of the oral cavity. This course will provide the student with a basic knowledge of drugs and their effects. It provides knowledge of emergencies and the prevention

and treatment of these emergencies within a dental office environment. It will also acquaint students with ethical practices of dentistry, along with knowing Minnesota dental law.

Transfer Curriculum Goal(s): none

DENT 1116 Dental Clinic I

Credits: 8

Prerequisite: DENT 1106

Co-Requisite: none

This course is part of the required curriculum for the Dental Assisting program diploma. This course will focus on the ability of the student to practice for proficiency the tasks performed in clinical situations.

Transfer Curriculum Goal(s): none

DENT 1118 Dental Radiology I

Credits: 2

Prerequisite: none

Co-Requisite: DENT 1116

This course is designed to enable the student to possess the knowledge to allow them to identify landmarks and mount various series of radiographs. It provides the student with the knowledge in the properties of x-rays, the generation of x-rays, basic ionizing radiation information, machine components and identification of the paralleling technique. Darkroom technique and radiology infection control protocol will also be identified.

Transfer Curriculum Goal(s): none

DENT 1120 Preventive Dentistry

Credits: 2

Prerequisite: none

Co-Requisite: DENT 1106

This course will focus on learning about oral hygiene, fluorides and hygiene aids. It also focuses on the cause, prevention and care of periodontal disease. It will cover basic nutrition and its relation to dental health.

Transfer Curriculum Goal(s): none

DENT 1123 Dental Clinic II

Credits: 9

Prerequisite: DENT 1116, DENT 1118, DENT 1106, DENT 1120

Co-Requisite: none

This course is designed to give the student a practical application of chair-side procedures within a clinical environment. It will emphasize those procedures considered expanded functions in the state of Minnesota.

Transfer Curriculum Goal(s): none

DENT 1124 Biomaterials

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is designed to provide knowledge of dental materials and in-

clude the properties and mixing technique of each material.

Transfer Curriculum Goal(s): none

DENT 1129 Dental Radiology II

Credits: 2

Prerequisite: DENT 1118

Co-Requisite: none

This course is a continuation of Dental Radiology I with emphasis on patient management, radiation safety, additional radiographic techniques and legal issues relating to radiology.

Transfer Curriculum Goal(s): none

DENT 1132 Dental Specialties

Credits: 2

Prerequisite: DENT 1106

Co-Requisite: none

This course is designed to provide the student with knowledge of terminology, instruments, and procedures in the specialty areas of oral surgery, endodontics, orthodontics, periodontics, prosthodontics and pediatric dentistry.

Transfer Curriculum Goal(s): none

DENT 1133 Principles of Practice Management and Communication

Credits: 2

Prerequisite: DENT 1106

Co-Requisite: none

This course teaches general principles of communication in health care settings. Specific emphasis is placed on verbal and nonverbal skills, assertiveness and confidentiality in a variety of situations to include receptionist, office manager, business manager, insurance clerk, records manager, data processor, appointment clerk, book-keeping and operation of basic office equipment.

Transfer Curriculum Goal(s): none

DENT 1150 Dental Internship

Credits: 1-7

Prerequisite: instructor's permission

Co-Requisite: none

This course is designed to provide the student with the opportunity of a practical application of chair-side procedures within a dental practice/facility environment. The student's progress is monitored by an instructor and supervised by a licensed dentist.

Transfer Curriculum Goal(s): none

DENT 1340 Dental Review

Credits: 1

Prerequisite: instructor's permission

Co-Requisite: none

This course is designed to provide the student with the opportunity to review for the national certification and state registration exams.

Transfer Curriculum Goal(s): none

DENT 1342 Topics in Dentistry

Credits: 1-4

Prerequisite: none

Co-Requisite: none

This course will cover selected topics of interest in Dental Assisting.

Transfer Curriculum Goal(s): none

Diesel & Heavy Equipment Technician

DHET 1103 Introduction to Construction Equipment

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will introduce students to various makes and models of construction equipment and safety related to the basic operation of construction equipment.

Transfer Curriculum Goal(s): none

DHET 1107 Electrical Theory

Credits: 3

Prerequisite: none

Co-Requisite: DHET 1108

This course covers the theory, principles of operation, troubleshooting, testing, maintenance, and repair techniques of electrical components and systems found on modern construction equipment and trucks. Battery starting, charging, accessory systems, electronic controls will be emphasized.

Transfer Curriculum Goal(s): none

DHET 1108 Electrical Lab

Credits: 5

Prerequisite: none

Co-Requisite: DHET 1107

This course is associated with the electrical theory course. Students will be assigned lab projects relating to testing and repair of electrical systems and components used on construction equipment and trucks.

Transfer Curriculum Goal(s): none

DHET 1117 Engine Theory

Credits: 3

Prerequisite: none

Co-Requisite: DHET 1118

This course covers Engine and Electrical related Safety concerns relating to general shop practices and tools used when maintaining, diagnosing, and repairing Engine and Electrical systems and components. The Theory and principals of Engine systems, Fuel systems, components, and sub-assemblies used on construction, mobile, and truck related systems will be covered.

Transfer Curriculum Goal(s): none

DHET 1118 Engine Lab

Credits: 5

Prerequisite: none

Co-Requisite: DHET 1117

This course is associated with the engine theory class. Students will be assigned lab projects relating to the troubleshooting and repair of diesel engines used on construction equipment and trucks.

Transfer Curriculum Goal(s): none

DHET 1123 Customer Service and Service Management

Credits: 2

Prerequisite: none

Co-Requisite: none

In this course the student will gain the proper skills necessary to provide customer service both in the shop and out in the field as a professional service technician. The student will also be introduced to the organization and management skills required by today's parts and service personnel. Students will also be introduced to financial statements.

Transfer Curriculum Goal(s): none

DHET 1125 Hydraulic Theory

Credits: 3

Prerequisite: none

Co-Requisite: DHET 1126

This course covers the theory and operation of hydraulic and hydrostatic components and systems used on construction equipment and truck related systems. Reading and understanding hydraulic schematics will be emphasized.

Transfer Curriculum Goal(s): none

DHET 1126 Hydraulic Lab

Credits: 5

Prerequisite: none

Co-Requisite: DHET 1125

This course is associated with the hydraulic theory courses. Students will be assigned lab projects relating to troubleshooting and repair of hydraulic and hydrostatic components and systems used on construction equipment and truck related systems.

Transfer Curriculum Goal(s): none

DHET 1128 Power Train Theory

Credits: 2

Prerequisite: none

Co-Requisite: DHET 1129

This course covers the theory and operations of power shift and other hydraulically shifted transmissions, differentials, final drives, and undercarriages used on construction equipment. Manual non-twin countershaft transmission will also be covered.

Transfer Curriculum Goal(s): none

DHET 1129 Power Train Lab

Credits: 5

Prerequisite: none

Co-Requisite: DHET 1128

This course is associated with the power train theory course. Students will be assigned lab projects relating to troubleshooting, failure analysis, and repair of power train components related to construction equipment.

Transfer Curriculum Goal(s): none

DHET 1132 On Highway Vehicle Systems Theory

Credits: 3

Prerequisite: DHET 1107 and DHET 1117, or DHET 1125 and DHET 1128

Co-Requisite: DHET 1133

This course covers the theory, operation, testing, and repair of compressed air systems, air and hydraulic brakes, steering, suspension, clutches, manual transmissions, differentials, and HVAC systems found on on-highway construction vehicles.

Transfer Curriculum Goal(s): none

DHET 1133 On Highway Vehicle Systems Lab

Credits: 4

Prerequisite: DHET 1107 and DHET 1117, or DHET 1125 and DHET 1128

Co-Requisite: DHET 1132

Students will be assigned lab projects typically relating to repairs made in a heavy equipment repair facility. Emphasis will be on testing and repairing air, hydraulic brake systems, steering suspension, clutches, manual transmissions, differentials, and HVAC systems.

Transfer Curriculum Goal(s): none

DHET 1310 Trade Math

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers topics used in the diesel mechanic industry. Some of the topics of this course include calculations involving threads, piston displacement, job tickets, and Ohms Law. Students will also read measuring devices and scales commonly used in a shop.

Transfer Curriculum Goal(s): none

Earth Science

ESCI 1400 Geology of National Parks

Credits: 3

Prerequisite: none

Co-Requisite: none

This introductory course is a survey of the principles of geology, thematically centered on the processes that shaped the continent of North America, with special emphasis on the

National Parks and Monuments of the United States. It includes topics such as plate tectonics, mountain building, volcanoes, faults and faulting, erosion by water, wind, and ice, ice ages, glacial landscapes, fossilization, and geologic time. Students will apply newly acquired geologic skills to case studies of individual national parks.

Transfer Curriculum Goal(s): 3,10

ESCI 1405 Astronomy

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a survey of the science of Astronomy at the introductory level. Topics include, but are not limited to, the history of the science of Astronomy, the solar system and comparative planetology, the Sun, stars and stellar evolution, the Milky Way galaxy, galaxies and galactic evolution, the Universe, cosmology, extra-solar planets, and extra-terrestrial life. Weekly laboratory participation is required for this course. Lab activities support lecture section topics and involve using the tools and instruments of astronomy. Night time astronomy field trips are an integral part of the course when conditions permit.

Transfer Curriculum Goal(s): 3

ESCI 1411 Physical Geology

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a survey of the fundamental principles of geology including analysis of geologic material, topography and geomorphology, mapping and interpretation of geologic structures, and the geologic processes that have produced the various geologic features. Lab and lecture topics include minerals, rock, earthquakes, volcanic activity, mountain building, plate tectonics, glaciers, rivers, groundwater, oceans, and aeolian processes.

Transfer Curriculum Goal(s): 3

ESCI 1421 Minnesota Geology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course introduces the student to fundamental geologic principles for the purpose of their direct application to the geology of the state of Minnesota. Topics will include, but are not limited to, rocks and minerals, plate tectonics, and surficial geology, including marine processes, igneous processes, introductory stratigraphy and sedimentation, paleontology, glaciers and glacial processes, and topics in environmental geology.

Transfer Curriculum Goal(s): 3

ESCI 1444 Natural Disasters

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of phenomena known collectively as natural disasters, covered from the geoscientific perspective, with consideration for the impact of such events on human societies. Topics in this course will include volcanoes, hurricanes, tsunamis, earthquakes, and others. Course also includes studies of the underlying processes that create the environment for these events, such as plate tectonics, the oceanic heat budget, atmospheric circulation, and issues of human population.

Transfer Curriculum Goal(s): 3,10

ESCI 1451 Oceanography

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the science of oceanography through the interdisciplinary areas of biological, chemical, geological, and physical oceanography. Topics include ocean floor, plate tectonics, sea water chemistry, currents, waves, tides, coasts, and marine life. Contemporary environmental topics are also part of this course and may include marine contamination, marine noise, overfishing, alternative energy, global climate change, tsunami and storms, coastal issues, and marine resources.

Transfer Curriculum Goal(s): 3,10

ESCI 1452 Oceanography Lab

Credits: 1

Prerequisite: none

Co-Requisite: none

This optional laboratory course is an introduction to the science of oceanography through hands-on experiences in the interdisciplinary areas of biological, chemical, geological, and physical oceanography. This course includes a variety of activities supporting the topics discussed in Oceanography lecture. These topics may include the ocean floor, plate tectonics, air-sea interactions, sea water chemistry, currents, waves, tides, coastal processes, and ocean life. Laboratory exercises will also focus on environmental topics which may include pollution, over fishing and food supply, alternative energy, global warming, El Nino Southern Oscillation, the North Atlantic Oscillation, tsunami and storms, coastal problems, marine resources, etc. While not required, it is recommended that you complete

ESCI 1451 before enrolling in this course.

Transfer Curriculum Goal(s): 3,10

ESCI 1454 Earth Science and the Environment

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a survey of the scientific underpinnings of contemporary environmental issues on the global, continental, and regional scales. It is an introductory course for disciplines of geology, meteorology and oceanography but is also a course on the practical applications of these sciences for inquiry into the human impact on Earth's concentric spheres.

Transfer Curriculum Goal(s): 3,10

ESCI 1455 Honors Earth Science and the Environment

Credits: 4

Prerequisite: admission to Honors program

Co-Requisite: none

This course is a survey of the scientific underpinnings of contemporary environmental issues on the global, continental, and regional scales. For the geoscience disciplines of geology, meteorology, climatology, and oceanography, it is an introductory course. But is also a course on the practical applications of these sciences for inquiry into the human impact on Earth's concentric spheres. Students enrolled in this honors course will be required to read additional scientific literature, participate in team projects, and complete a capstone project. Activities may include (original) research, inquiry based investigation(s), collaboration, or other project types that the instructor deems worthy of the Honors' designation. At least one extended field trip may be required.

Transfer Curriculum Goal(s): 3,10

ESCI 1457 Honors Oceanography

Credits: 3

Prerequisite: admission to Honors program

Co-Requisite: none

This course is an introduction to the science of oceanography through the interdisciplinary areas of biological, chemical, geological, and physical oceanography. Topics include ocean floor, plate tectonics, sea water chemistry, currents, waves, tides, coasts, and marine life. Contemporary environmental topics are also part of this course and may include marine contamination, marine noise, overfishing, alternative energy, global climate

change, tsunami and storms, coastal issues, and marine resources. Students enrolled in this honors course will be required to read additional scientific literature, participate in team projects, and complete a capstone project. Activities may include original research, inquiry based investigations, collaboration, service projects, or other project types that the instructor deems worthy of the honors designation. An extended field trip to a professional scientific conference may be required.

Transfer Curriculum Goal(s): 3,10

ESCI 2581 Topics in Earth Science

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Earth Science. On demand.

Transfer Curriculum Goal(s): none

Economics

ECON 1450 The American Economy

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to and a descriptive survey of the modern American Economy. Concentration is on the major forces affecting the economy, with special attention given to the role and responsibility of the federal government.

Transfer Curriculum Goal(s): 5

ECON 1598 Topics in Economics

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Economics. Offered on demand.

Transfer Curriculum Goal(s): none

ECON 2401 Principles of Economics-Macroeconomics

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides the basic principles behind the economic process, nature of the free-enterprise system, money and banking, national income, monetary and fiscal policy, and other macroeconomic concepts. Although not required, it is recommended that students complete ECON 1450 prior to taking this course.

Transfer Curriculum Goal(s): 5

ECON 2402 Principles of Economics-Microeconomics

Credits: 3

Prerequisite: ECON 1450 or sopho-

more standing

Co-Requisite: none

This course studies the functioning of the market in the free-enterprise economy and the various factors that affect market conditions and market structures. Included in the study are the price system, consumer behavior, business firm behavior, resource markets, income distribution, and other microeconomic concepts.

Transfer Curriculum Goal(s): 5

Ecotourism and Environmental Studies

ECOT 1100 Introduction to Ecotourism

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will expose students to ecotourism. Ecotourism is responsible travel to natural areas that aims to conserve the environment and sustains the well-being of local people.

Transfer Curriculum Goal(s): none

ECOT 1120 Environmental Wisdom of the Elders

Credits: 3

Prerequisite: none

Co-Requisite: none

Modern society is just beginning to realize the value of what is called traditional or indigenous ecological knowledge. In order to understand how Ecological Tourism (Ecotourism) can provide a value both to the indigenous people and the environments they depend on, one must understand these relationships. This course will help the student understand how to save endangered ecosystems and species by providing indigenous peoples with a way to continue living in harmony with their surroundings. By providing a livelihood for their families, both the people and the environment can benefit.

Transfer Curriculum Goal(s): none

ECOT 1130 Global Environmental Travel

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will look at the increasing interest by many travelers to visit locations, but with a "softer touch" than in the past. More travelers want to learn, to see, to understand, and to help save environments and cultures for present and future generations.

Transfer Curriculum Goal(s): none

ECOT 1350 Ecotourism Internship

Credits: 1-6

Prerequisite: consent of instructor

Co-Requisite: none

This course is designed to provide students with an opportunity to work in some aspect of Ecotourism.

Transfer Curriculum Goal(s): none

ECOT 2160 Ecotourism Travel Plan Development

Credits: 3

Prerequisite: instructor's consent

Co-Requisite: none

This is a capstone course for the AAS degree in Ecotourism. The student will design a trip, including marketing, pricing, arrangements, etc., ensuring that the trip is in fact sensitive to the environments and cultures found in the location.

Transfer Curriculum Goal(s): none

ENVR 1120 Indigenous Environmental Knowledge

Credits: 3

Prerequisite: none

Co-Requisite: none

Studying indigenous peoples' way of life can give us a key to how to insure the future survival of all people on this planet. Modern Society is beginning to realize the value of what is called traditional or indigenous environmental knowledge. This knowledge is the way in which indigenous people relate to their environments. This knowledge is founded on spiritual-cultural instruction from ancient times and on generations of careful observation within an ecosystem of continuous residence. This course will help the student understand indigenous societies living in a sustainable manner.

Transfer Curriculum Goal(s): none

ENVR 1400 Introduction to Environmental Studies

Credits: 3

Prerequisite: none

Co-Requisite: none

This course involves developing an understanding of the complexities of our environment. From the Galaxies our Universe and forces that hold it together to the various systems and process that are part of our planet and an understanding of how everything is tied together. This course will bring us a kaleidoscope of knowledge from the videos of NOVA on the Elegant Universe, to information from our online text - the Habitable Planet on environmental relationships of Atmosphere, Oceans and Ecosystems. Along with this are readings and discussions from Classics in Environmental Studies by Nelissen, Straaten and Klinkers.

Transfer Curriculum Goal(s): 5,10

Emergency Medical Technology Studies

EMTS 1503 CPR

Credits: 1

Prerequisite: none

Co-Requisite: none

This course in cardiopulmonary resuscitation is a combination of artificial respiration and artificial circulation. The student will learn to recognize respiratory and cardiac arrest and provide basic life support until advanced life support is available. American Heart Association Certification will be given on successful course completion. Course is offered on demand.

Transfer Curriculum Goal(s): none

EMTS 1504 Emergency Medical Technician

Credits: 7

Prerequisite: EMTS 1503 or CPR certification

Co-Requisite: none

This course will prepare the student to participate in the Emergency Medical System at the entry level. This 160 hour course teaches the skills required to determine the severity of a traumatic and/or medical emergency along with basic life support treatment. The classroom experience includes lecture, practical experiences, online and written assignments. Successful completion of this course qualifies the student to sit for the National Registry of EMT's practical examination and then National Registry of EMT-Basic computer adaptive exam, and. Passing the NREMT exam fulfills the Minnesota EMS Regulatory Board requirements for certification as an Emergency Medical Technician-Basic.

Transfer Curriculum Goal(s): none

EMTS 1505 First Responder

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides advanced knowledge of initial emergency care needed to sustain life support for the victim(s) of serious illness or injury. This course fulfills the first aid requirement for law enforcement students and initial first responders. American Heart Association Healthcare Provider Certification will be given on successful course completion. Students may earn first responder certification.

Transfer Curriculum Goal(s): none

EMTS 1512 Emergency Medical Technician Refresher

Credits: 2

Prerequisite: EMT certification

Co-Requisite: none

EMT Refresher meets for 24 hours and reviews the core concepts of the EMT curriculum. This course meets the requirements of Minnesota for recertification as an EMT.

Transfer Curriculum Goal(s): none

EMTS 1515 First Responder Refresher

Credits: 1

Prerequisite: First Responder certification

Co-Requisite: none

First Responder Refresher meets for 16 hours and reviews the core concepts of the First Responder curriculum. This course meets the requirements of Minnesota for recertification as a First Responder.

Transfer Curriculum Goal(s): none

EMTS 1580 Special Topics

Credits: 1-6

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Emergency Medical Technology Studies. Offered on demand.

Transfer Curriculum Goal(s): none

Emerging Digital Technologies

ETEC 1120 Immersive Worlds, Second Lives and Avatars

Credits: 2

Prerequisite: must be 18 years or older

Co-Requisite: none

This course introduces students to immersive three-dimensional virtual environments. In this introductory course, we will explore Wonderland, Second Life, and massive multi-user gaming worlds. Students will learn how to enter the worlds, travel from place to place, communicate, host a meeting, and in some cases, create objects. Individuals registering must be 18 years or older. Students must have computers that meet these specifications listed at <http://secondlife.com/support/sysreqs.php>, or be able to work at Central Lakes College on designated computers.

Transfer Curriculum Goal(s): none

Engineering

ENGR 1411 Engineering Physics I

Credits: 5

Prerequisite: none

Co-Requisite: none

This course provides a general theoretical and practical introduction to physics. Primary topics to be covered fall under the classification of classical physics, to include Newtonian topics such as motion in one and two dimensions, forces and dynamics, oscillatory systems, circular motion, systems in equilibrium, vectors and vector math, and work and energy. Appropriate technology, such as spreadsheets, word processors and Mathematica will be used extensively. Development of critical thinking skills will be emphasized. A majority of the class time will be used in collaborative work to develop and solve problems.
Transfer Curriculum Goal(s): 3

ENGR 1412 Engineering Physics II **Credits: 5**

Prerequisite: ENGR 1411
Co-Requisite: MATH 1478

This course provides a general theoretical and practical introduction to physics. Primary topics to be covered are the ideal gas law, thermodynamics, magnetism and electricity, electrical circuits, and relativity. Appropriate technology, such as spreadsheets, word processors and Mathematica will be used extensively. Development of critical thinking skills will be emphasized. A majority of the class time will be used in collaborative work to develop and solve problems.
Transfer Curriculum Goal(s): 3

ENGR 1500 Introduction to Engineering **Credits: 2**

Prerequisite: none
Co-Requisite: none

History of engineering achievements, social impact of engineering, critical thinking and engineering problem solving; engineering careers and work opportunities, professional responsibilities and ethics. Introductions to the use of MS Word, Power Point, Excel and Mathematica in engineering.
Transfer Curriculum Goal(s): none

ENGR 1510 Introduction to Engineering Design **Credits: 2**

Prerequisite: none
Co-Requisite: none

This course introduces the student to the design processes in engineering. The student will develop problem solving skills through project management - planning, organizing, and designing a project within budget and time. The projects involve working in groups; they require effective teamwork development - professional organization, effective communica-

tion, standard documentation, time management, and decision making skills that are essential in working as a team.

Transfer Curriculum Goal(s): none

ENGR 1560 Digital Logic Design

Credits: 3

Prerequisite: MATH 1470 or concurrent enrollment

Co-Requisite: none

This is a course on number systems, Boolean algebra, logic gates, combinational and sequential circuits, MSI based design, programmable logic and memory devices, VHDL synthesis, computer aided analysis, and simulation. The laboratory component reinforces concepts with hands-on design projects.

Transfer Curriculum Goal(s): none

ENGR 2547 Statics

Credits: 3

Prerequisite: MATH 1478 and ENGR 1411

Co-Requisite: none

This course involves rigid-body mechanics and provides a necessary background for the study of the mechanics of deformable bodies. Statics deals with structures in equilibrium such as structures at rest or moving at a constant velocity. It develops the equations of equilibrium and applies them to the analysis of simple engineering structures and machines. Specific subjects include equilibrium of trusses, frames and machines, the analysis of friction forces and topics relating to the center of gravity and mass moments of inertia.

Transfer Curriculum Goal(s): none

ENGR 2548 Dynamics

Credits: 3

Prerequisite: ENGR 1412, ENGR 2547

Co-Requisite: MATH 2459

This course is the study of kinematics and kinetics as applied to the analysis of simple engineering structures and machines. Kinematics is the study of motion of particles and extended rigid bodies without reference to the causes of the motion. Kinetics is the study of the relationship between motion and the forces that cause the motion. Specific topics include motion in 1, 2 and 3 dimensions, relative motion and connected bodies and energy and momentum.

Transfer Curriculum Goal(s): none

ENGR 2549 Mechanics of Materials **Credits: 3**

Prerequisite: ENGR 2547

Co-Requisite: none

This course presents the study of me-

chanics of deformable bodies. It deals with the analysis of the stresses and of the corresponding deformation in various structural members. Axial, torsional, pure bending and transverse loadings will be considered. Analytical and computer solutions to problems will be employed. The course will also include laboratory determinations of stress-strain relationships. Multivariable calculus and Mathematica will be used to determine moments of inertia.
Transfer Curriculum Goal(s): none

ENGR 2569 Circuit Analysis I

Credits: 4

Prerequisite: ENGR 1412 or MATH 1478

Co-Requisite: none

This course covers the linear circuits and their responses under some input and output conditions. The Ohm's Law, Kirchhoff's Current Law, and Kirchhoff's Voltage Law are used for analysis. The basic elements and networks containing dependent and independent sources are analyzed using standard circuit analysis techniques including the nodal analysis, mesh analysis, Thévenin's Theorem, Norton's Theorem, and the principle of superposition. Applications of operational amplifier are analyzed. The behavior of the inductor and capacitor are investigated as energy storage devices. Methods of analysis for first and second order circuits are investigated. Circuit analysis methods, including analytical and computer based solutions are employed. A lab supplements the analytical course material.
Transfer Curriculum Goal(s): none

ENGR 2570 Circuit Analysis II **Credits: 3**

Prerequisite: ENGR 2569

Co-Requisite: none

This course covers the following topics: sinusoidal sources, phasors, impedance and admittance, sinusoidal steady-state analysis, average power, RMS values, apparent power, complex power, mutual inductance, transformers, complex frequency, Laplace transforms, circuit analysis in the s-domain, poles, zeros and diagrams, filters, and two-port networks. The student is given simulated laboratory experience through the use of computer-aided analysis. The laboratory component reinforces concepts with hands-on design projects.

Transfer Curriculum Goal(s): none

ENGR 2580 Topics in Engineering **Credits: 1-3**

Prerequisite: instructor's consent

Co-Requisite: none

This course will examine selected top-

ics of interest in Engineering. Offered on demand.

Transfer Curriculum Goal(s): none

English

ENGL 1410 Composition I

Credits: 4

Prerequisite: Accuplacer reading comprehension score of 78, or successful completion of READ 1500 with a grade of C or better, or successful completion of ENGL 1596 with a grade of C or better

Co-Requisite: none

The rhetorical strategies of description, narration, and exposition (including but not limited to exemplification, classification, process analysis, comparison /contrast, and definition) will be the focus of the course. A descriptive essay, a narrative essay, and five expository essays at the professor's discretion will constitute the seven formal essay assignments. Students may also be asked to write journals, a resume and letter of application, and to review grammar. Students will be expected to adhere to the basic writing process (brainstorming, outlining, drafting, and revision—individual and peer) and demonstrate their awareness of the following concepts in their reading and writing: thesis, audience, tone, unity, coherence, and emphasis. The course will also include a literature component (selections at professor's discretion) to present basic critical terminology and foster critical thinking skills.

Transfer Curriculum Goal(s): 1

ENGL 1411 Composition II

Credits: 4

Prerequisite:

Co-Requisite: none

Students will write a minimum of five formal essays, demonstrating their familiarity with the following rhetorical strategies: analysis (of ideas or human situations into comparable or constituent parts) cause and effect reasoning, inductive/deductive reasoning, and argument/persuasion. Subjects may be but are not limited to reaction, evaluation, and interpretation of literature and/or sociocultural phenomena. Students will learn the principles of the academic research process and their essays will demonstrate a command of both the APA (American Psychological Association) and the MLA (Modern Language Association) formats.

Transfer Curriculum Goal(s): 1

ENGL 1421 Honors Composition II: Public and Professional Writing

Credits: 4

Prerequisite: ENGL 1410

Co-Requisite: none

Honors Composition II is a writing-intensive course that aims to teach students how to write in a professional and public capacity through frequent writing experiences similar to the writing which they are likely to encounter in community or work situations. Students will compose rhetorically situated pieces including a research proposal, annotated bibliography, research report, e-documents, source reviews, and professional correspondence. Application will extend beyond the college classroom, reflecting common forms of civic engagement that exist in diverse and pluralistic societies. Students will learn the foundational elements of argumentation and will develop researching, critical thinking, and collaborative writing strategies as they draft and revise multiple documents for multiple audiences. The capstone project for the course requires students to showcase their research in a public forum.

Transfer Curriculum Goal(s): 1,9

ENGL 1422 Practical Writing

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will learn to structure business correspondence, including memos, letters, executive summaries and e-mails. Longer reports will include proposals, mechanism reports, and multi-step, collaborative reports. Students will learn to represent information for different audiences, such as co-workers, the public and upper-level administration, and they will use media such as power point presentations to enhance their messages. Because writing is often collaborative, the course will emphasize working in groups, treating group members ethically, developing time lines for projects and dividing work within the group.

Transfer Curriculum Goal(s): 1,2

ENGL 1450 Introduction to Humanities

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introductory survey of the genres and themes of the humanities. Readings, lectures, and class discussions will focus on genres such as music, the visual arts, drama, literature, and philosophy. As themes, the ideas of freedom, love, happiness, death, nature, and myth may be explored from a western and non-west-

ern point of view.

Transfer Curriculum Goal(s): 6,8

ENGL 1452 Classical Mythology

Credits: 3

Prerequisite: none

Co-Requisite: none

An introductory course presenting classical mythology as a means of understanding the human condition through general readings, with special emphasis on classical myth's continued presence in modern Western culture.

Transfer Curriculum Goal(s): 6

ENGL 1454 Film Appreciation

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to film as art form, tracking theory with emphasis on the evolution of directorial and cinematic technique through the context of film history. Critical evaluations and in class discussion will be integral parts of the course.

Transfer Curriculum Goal(s): 6

ENGL 1460 Honors Literature: The Great Books

Credits: 3

Prerequisite: Admission to Honors Program

Co-Requisite: none

This is a seminar course of the great books of non-Western and Western literature. Students will read, discuss, analyze, and evaluate creative literature (plays, novels, poetry collections) and non-fiction literature. Students will compose two, formal, written response to the ideas presented in the literary works. While this course will use the language of literature to discuss characterization, plot, conflict, setting, and tone, the course focuses mainly on the ideas presented in the texts.

Transfer Curriculum Goal(s): 6

ENGL 1463 Introduction to Literature

Credits: 3

Prerequisite: none

Co-Requisite: none

Introduction to literature is a survey course of great, creative literature, specifically prose, drama, and poetry. In addition to developing personal responses to the selected works in the course, students will become adept at discussing and analyzing literature and will develop fluency in literary concepts (plot, point of view, characterization, setting, symbolism, theme, tone, figurative language, stream-of-consciousness, Realism, et. al.). For

students wishing to continue study in poetry, drama, American, or world literatures, this course is a necessary starting point. Students who wish to expand their reading experience, develop a deeper appreciation for creative literature, and learn techniques for literary interpretation will also benefit greatly from this course. Transfer Curriculum Goal(s): 6,7

ENGL 1468 Poetry

Credits: 3

Prerequisite: none

Co-Requisite: none

A course designed to develop a deeper understanding and appreciation of poetry through reading, discussion, and critical analysis of selected poets ranging from Shakespeare to the present. A Minnesota poet may visit to read his/her poetry following a study and discussion of the poet's writings. Transfer Curriculum Goal(s): 6

ENGL 1469 American Short Story

Credits: 3

Prerequisite: none

Co-Requisite: none

In addition to learning the basic elements of the short story genre, students will consider thematic issues stemming from the historical, cultural, biographical, and critical contexts that drove its evolution to its present day form. The student will gain an understanding of what it means to be American. Transfer Curriculum Goal(s): 6

ENGL 1477/1478 Authors in Focus

Credits: 1-3

Prerequisite: none

Co-Requisite: none

ENGL 1477 and 1478 are one-credit mini-courses on selected writers and their works. Offered on demand. Transfer Curriculum Goal(s): 6

ENGL 1510 English for Speakers of Other Languages I

Credits: 3

Prerequisite: none

Co-Requisite: none

Intermediate integrated English language skills (reading, writing, listening, and speaking) for academic and business purposes through culture using authentic language situations (reading authentic academic language texts, writing authentic academic papers, quizzes, listening to authentic lectures and participating in discussions, asking questions. Transfer Curriculum Goal(s): none

ENGL 1512 English for Speakers of Other Languages II

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers high-intermediate and advanced listening, speaking, reading, writing and grammar skills, presented with an integrated approach. The goal is to improve student ability to communicate in everyday life and to build confidence in using more complex grammatical patterns, especially for academic purposes. This course focuses on developing reading fluency, increasing academic vocabulary, and affording ample practice writing short academic essays. Transfer Curriculum Goal(s): none

ENGL 1566 Student Newspaper I

Credits: 1

Prerequisite: none

Co-Requisite: none

These credits will be for work with the newspaper and will be the student's choice of reporting, design and layout, editing, sales, and photography. Transfer Curriculum Goal(s): none

ENGL 1567 Student Newspaper II

Credits: 1

Prerequisite: ENGL 1566

Co-Requisite: none

These credits will be for work with the newspaper and will be the student's choice of reporting, design and layout, editing, sales, and photography. Transfer Curriculum Goal(s): none

ENGL 1580 Topics in Humanities

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course offers the opportunity for focused study in one or more areas in the humanities. Transfer Curriculum Goal(s): none

ENGL 1581 Topics in English

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course offers the opportunity for focused study in one or more areas in English. Transfer Curriculum Goal(s): none

ENGL 1590 Service Learning

Credits: 1

Prerequisite: none

Co-Requisite: none

Students in this course develop and/or implement service learning project to help the college's community including the surrounding local community under the supervision of college faculty and in cooperation with the staff of community organizations and agencies. Projects may include collaboration with college classes, various community agencies and organiza-

tions, education projects for college students, mentoring and shadowing. Students gain hands-on experience in project planning, development, implementation and evaluation.

Transfer Curriculum Goal(s): none

ENGL 1596 Writing II

Credits: 3

Prerequisite: successful completion of READ 0591 with grade of C or better, Accuplacer scores of 78 or higher, or instructor approval

Co-Requisite: none

This course offers the student instruction leading to writing improvement. Emphasis on sentence structure and usage, appropriate conventions, and application of these to writing sentences, paragraphs, and short essays will prepare students to succeed in college level writing courses (Composition I). Transfer Curriculum Goal(s): none

ENGL 2450 World Literature

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of selected works from Western and non-Western literary traditions. Focus will be on critical reading and discussion, the elements of literature, and analysis, interpretation, and evaluation of literature from different philosophies and cultures. Transfer Curriculum Goal(s): 2,8

ENGL 2451 Women in Literature

Credits: 3

Prerequisite: none

Co-Requisite: none

This course explores women in literature, literature by women, the stereotypes of women in literature, and specific themes with which women writers have concerned themselves. Occasional course offering. Transfer Curriculum Goal(s): 6

ENGL 2455 American Indian Literature

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of literature of the North, South, and Central American Indian, with a special emphasis on the literature published in the 20th Century. Transfer Curriculum Goal(s): 6,7

ENGL 2457 British Literature Pre-1800

Credits: 3

Prerequisite: none

Co-Requisite: none

Beginning in the Medieval period and

ending with the poetry, drama, and prose of the Early Modern Period and the Restoration, this course will trace the emergence of a nation's literature and language. When it comes to discussing early British Literature, most people are familiar with the names Shakespeare, Johnson, Sidney, and Wyatt; however, in addition to these writers, there are many other important, but lesser known authors who will be covered in this course.
Transfer Curriculum Goal(s): 6

ENGL 2458 British Literature 1800-Present

Credits: 3

Prerequisite: none

Co-Requisite: none

This course begins with what has come to be known as the Romantic Period. Following this is the Victorian Period, an era in which the novel rises to the forefront of British Literature. Finally, the Modern Period is covered. This section of the course will focus on modernism, the build up to WWI in poetry and prose, the reaction to modernism, and finally the post-war writings of the 1950's to the end of the century.

Transfer Curriculum Goal(s): 6

ENGL 2467 American Literature Pre-1861

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of North American literature prior to the modern era. Non-fiction and literary works (short stories, novellas, poetry, and drama) will encapsulate the colonial, revolutionary, and romantic literary periods. The course focuses on literature as a reflection of the history of American ideas.

Transfer Curriculum Goal(s): 6,7

ENGL 2468 American Literature 1861 - Present

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of the literature of the Realistic, Naturalistic/Symbolic, and Modern periods (1865-1950). The emphasis will focus on the literature as a reflection of the history of American ideas.

Transfer Curriculum Goal(s): 6,7

ENGL 2470 Creative Nonfiction Credits: 3

Prerequisite: none

Co-Requisite: none

In this course students will work to define and explore the literary genre of creative nonfiction, developing the

techniques used to gather information and the literary skills needed to turn bare facts into compelling, artful, purpose-driven prose. Through examination of example texts and immersion in the process of imaginative writing, participants will come to better understand and express themselves and their world.

Transfer Curriculum Goal(s): 6

ENGL 2483 Creative Writing Credits: 3

Prerequisite: Accuplacer reading comprehension score of 78

Co-Requisite: none

In workshop format this course provides the study and practice of writing. From semester to semester, the course may emphasize fiction, non-fiction, poetry, or some combination of them. Students should consult instructor for further information.

Transfer Curriculum Goal(s): 6

ENGL 2484 Advanced Creative Writing

Credits: 3

Prerequisite: ENGL 2483

Co-Requisite: none

In workshop format this course provides advanced study and practice of writing. May emphasize fiction, nonfiction, or poetry, or some combination of them with some emphasis on writing for publication. Course is offered on demand. Students should consult instructor for more information.

Transfer Curriculum Goal(s): 6

ENGL 2566 Student Newspaper III Credits: 1

Prerequisite: ENGL 1567

Co-Requisite: none

These credits will be for work with the newspaper and will be the student's choice of reporting, design and layout, editing, sales, and photography.

Transfer Curriculum Goal(s): none

ENGL 2567 Student Newspaper IV Credits: 1

Prerequisite: ENGL 2566

Co-Requisite: none

These credits will be for work with the newspaper and will be the student's choice of reporting, design and layout, editing, sales, and photography.

Transfer Curriculum Goal(s): none

Farm Business Management

FBMA 2200 Current Issues in Farm Business Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students to further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in reducing potential risk, performing strategic planning, and revising business plans in their farm business operations. Emphasis is placed on the research of business management alternatives to meet their business and personal needs.

Transfer Curriculum Goal(s): none

FBMA 2201 Directed Studies - Current Issues in Farm Business Management

Credits: 1-5

Prerequisite: FBMA 2200

Co-Requisite: none

This course is designed to assist students to further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise database, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning, and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. This data also provides development and maintenance of farm business data, reports, and plans.

Transfer Curriculum Goal(s): none

FBMA 2210 Current Issues in Farm Business Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in improving risk management plans, strategic plans, and business plans in their farm business operations. Emphasis is placed on the research of business management alternatives to meet their business and personal needs. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2220 - Directed Studies - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2211 Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in improving risk management plans, strategic plans, and business plans in their farm business operations. Emphasis is placed on the research of business management alternatives to meet their business and personal needs. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2221 - Directed Studies - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2212 Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in improving risk management plans, strategic plans, and business plans in their farm business operations. Emphasis is placed on the research of business management alternatives to meet their business and personal needs. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2222 - Directed Studies - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2213 Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in improving risk management plans, strategic plans, and business plans in their farm business operations. Emphasis is placed on the

research of business management alternatives to meet their business and personal needs. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2223 - Directed Studies - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2214 Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to investigate and apply tools that may be effective in improving risk management plans, strategic plans, and business plans in their farm business operations. Emphasis is placed on the research of business management alternatives to meet their business and personal needs. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2224 - Directed Studies - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2220 Directed Studies - Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise data base, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning, and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2210 - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2221 Directed Studies - Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise data base, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning, and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2211 - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2222 Directed Studies - Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise data base, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning, and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2212 - Current Issues in Farm Business Management.)

Transfer Curriculum Goal(s): none

FBMA 2223 Directed Studies - Current Issues in Farm Business Management

Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise data base, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning, and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2213 - Current Issues in Farm Business Management.)
Transfer Curriculum Goal(s): none

FBMA 2224

Directed Studies - Current Issues in Farm Business Management

Credits: 1-5

Prerequisite: none

Co-Requisite: none

This course is designed to assist students further develop their skills in business management. It provides an opportunity for students to maintain the financial and enterprise data base, to generate financial statements, business analyses, and financial projections required for risk management planning, strategic management planning and farm business plan development. This data also provides the basis for commodity market planning and tax management planning. Emphasis is placed on the development and maintenance of farm business data, reports, and plans. (Students may enroll in a range of one to five credits during each enrollment, depending on their individual needs at the time. Students are encouraged to enroll in this course in sequence with FBMA 2214 - Current Issues in Farm Business Management.)
Transfer Curriculum Goal(s): none

FBMA 3100 Fund of Financial Management Relates Risk Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is intended to have the student enhance their decision-making skills relating to business risk management. This course will have the student further investigate tools available to their business that would be effective in reducing potential risk

for their operation. Emphasis will be placed on having the student research risk management options that will meet their business, family, and personal needs.

Transfer Curriculum Goal(s): none

FBMA 3101 Applied Financial Management Relates Risk Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is intended to have the student apply concepts in financial management that can be used in the development of a business risk management program. The student is to implement risk management tools that will assist in meeting their business, family and personal needs.

Transfer Curriculum Goal(s): none

FBMA 3110 Fund Financial Mgmt/Strategic Plan Emphasis

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will enable students to identify the elements necessary to evaluate and create a strategic plan for the business. Determining uses for the plan today and tomorrow and developing a plan to locate those team members necessary for strategic plan creation.

Transfer Curriculum Goal(s): none

FBMA 3111 Applied Financial Management/Strategic Plan Emphasis

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will provide practical application of strategic planning skills. Application skills will be practiced upon and applied to the student's business and business plan.

Transfer Curriculum Goal(s): none

FBMA 3120 Fundamentals of Financial Mgmt/Bus Plan Emphasis

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will provide practical application of the business plan. Application skills will be practiced and applied as the student's business plan is prepared and implemented.

Transfer Curriculum Goal(s): none

FBMA 3121 Applied Financial Mgmt/Bus Plan Emphasis

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will provide the necessary

instruction to put together and implement a business plan for the farm business.

Transfer Curriculum Goal(s): none

FBMA 3330

Directed Study - Decision Making Credits: 2

Prerequisite: FBM Diploma

Co-Requisite: none

This course will examine the individual, family and farm business decision-making processes with emphasis on upgrading and improving decision-making resources, tools and skills. Particularly, this course will lead the student to critically analyze information, applications, and implications of decision making as it related to their own situation. Students will evaluate their own decision making process.

Transfer Curriculum Goal(s): none

FBMA 3331

Directed Studies - Communications Credits: 2

Prerequisite: FBM Diploma

Co-Requisite: none

This course will assist the student in further acquiring and developing a higher level of communication skills. Students will review and evaluate various communication methods and techniques in dealing with and relating to individuals in both the public and private sector. Students will use this information in formulating an effective communication method and style. Additional course content may include student initiated or group activities.

Transfer Curriculum Goal(s): none

FBMA 3332 Directed Studies - Modern Agricultural Tech

Credits: 2

Prerequisite: none

Co-Requisite: none

This course will deal with experiencing modern agricultural technological changes and determining if they fit into an individual's farming operation.

Transfer Curriculum Goal(s): none

FBMA 3333 Directed Studies - Farm Business Family Transition

Credits: 2

Prerequisite: none

Co-Requisite: none

This course provides the opportunity for the student to study the many aspects of farm business and/or family transition which occur in the typical farm business.

Transfer Curriculum Goal(s): none

FBMA 3334 Directed Studies - Personal Management

Credits: 2

Prerequisite: none
Co-Requisite: none

This course will organize skills for effective management of farm employees and agribusiness personnel through development of handbooks, compensation/incentive packages, individual expectations/evaluations, and team meetings.

Transfer Curriculum Goal(s): none

FBMA 3335 Directed Studies - Enterprise Alternatives

Credits: 2

Prerequisite: none
Co-Requisite: none

This course will assist those students wanting to make changes in their farm business through enterprise expansion, addition or enhancement. The course will develop a set of procedures for exploring and evaluating alternative choices.

Transfer Curriculum Goal(s): none

FBMT 1112 Foundations for Farm Business

Management

Credits: 4

Prerequisite: none
Co-Requisite: none

This course is an overview of the Farm Business Management Program. The student will be introduced to goal setting, self and business assessment, record keeping, and business projections to provide the foundation for personal and business management progress. Current issues affecting business management are an integral part of the course.

Transfer Curriculum Goal(s): none

FBMT 1121 Preparation for Farm Business Analysis

Credits: 4

Prerequisite: none
Co-Requisite: none

This course will take the student through a step-by-step procedure to close out a complete year of farm business records. This course will emphasize tax planning, completing inputs to livestock and crop enterprises, and emphasizing cash and liabilities accuracy. A completed business and enterprise analysis will be the course focus.

Transfer Curriculum Goal(s): none

FBMT 1122 Implementing the System Management Plan

Credits: 4

Prerequisite: none
Co-Requisite: none

This course continues to build on the foundation of farm business management. The student will complete a

farm business financial and enterprise analysis. Sound financial record keeping is an integral component.

Transfer Curriculum Goal(s): none

FBMT 1131 Managing and Modifying Farm System Data

Credits: 4

Prerequisite: none
Co-Requisite: none

This course will help students refine their farm business data system and assist them in applying year end procedures for farm business analysis. Students improve accuracy in the following: farm enterprise analysis, tax planning and filing, and cash and liabilities checks.

Transfer Curriculum Goal(s): none

FBMT 1132 Interpreting and Using Farm System Data

Credits: 4

Prerequisite: none
Co-Requisite: none

This course provides an opportunity for the student to view the farm business and its various components through a number of vehicles such as balance sheets, farm personal and managerial inventories, enterprise reports and historical data.

Transfer Curriculum Goal(s): none

FBMT 1170 Intro to Farm Commodity Marketing

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to introduce students to the various methods and tools to market farm commodities.

Transfer Curriculum Goal(s): none

FBMT 1171, FBMT 1172 Directed Study - Intro to Farm Commodity Marketing

Credits: 1

Prerequisite: FBMT 1170
Co-Requisite: none

This course provides the student with the opportunity to use the various marketing methods and tools.

Transfer Curriculum Goal(s): none

FBMT 1173 Directed Study - Intro to Farm Commodity Marketing

Credits: 2

Prerequisite: FBMT 1170
Co-Requisite: none

This course provides the student with the opportunity to use the various marketing methods and tools.

Transfer Curriculum Goal(s): none

FBMT 1180 Applying Commodity Marketing Fundamentals

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to teach students to apply the various methods and tools to market farm commodities.

Transfer Curriculum Goal(s): none

FBMT 1181, FBMT 1182 Directed Study - Applying Commodity Marketing Fundamentals

Credits: 1

Prerequisite: FBMT 1180
Co-Requisite: none

This course provides students with the opportunity to apply marketing methods and tools to their individual farming operation.

Transfer Curriculum Goal(s): none

FBMT 1183 Directed Study - Applying Commodity Marketing Fundamentals

Credits: 2

Prerequisite: FBMT 1180
Co-Requisite: none

This course provides students with the opportunity to apply marketing methods and tools to their individual farming operation.

Transfer Curriculum Goal(s): none

FBMT 1190 Evaluating Farm Commodity Marketing Tools

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to teach students to evaluate the various farm marketing tools and to select the tool appropriate to the present marketing situation.

Transfer Curriculum Goal(s): none

FBMT 1191, FBMT 1192 Directed Study - Evaluating Farm Commodity Marketing Tools

Credits: 1

Prerequisite: FBMT 1190
Co-Requisite: none

This course will allow the student to implement and use the marketing tools appropriate to the current marketing situation.

Transfer Curriculum Goal(s): none

FBMT 1193 Directed Study - Evaluating Farm Commodity Marketing Tools

Credits: 2

Prerequisite: FBMT 1190
Co-Requisite: none

This course will allow the student to implement and use the marketing tools appropriate to the current marketing situation.

Transfer Curriculum Goal(s): none

FBMT 1211 Introduction to Farm Business Management
Credits: 4

Prerequisite: none

Co-Requisite: none

This course introduces basic farm business management concepts. Students will study the farm management planning cycle and develop an understanding of its relationship to: family and farm business goal setting, cash and enterprise accounting principles, and tax planning.

Transfer Curriculum Goal(s): none

FBMT 1213 Managing A Farm System in A Global Economy
Credits: 2

Prerequisite: none

Co-Requisite: none

This course assists the students in achieving awareness of development in agricultural policies and practices throughout the world and assessing the impact of these policies and practices on the profitability and viability of their farm business.

Transfer Curriculum Goal(s): none

FBMT 1223 Using System Analysis in Total Farm Planning
Credits: 2

Prerequisite: none

Co-Requisite: none

This course enables study of concepts related to farm business analysis, and exploration of possible implications and/or solutions to these concepts. A systematic method to assess farm business strengths and weaknesses based on the analysis will be used.

Transfer Curriculum Goal(s): none

FBMT 1233 Application of Productive Enterprise Information
Credits: 2

Prerequisite: none

Co-Requisite: none

This course describes procedures for applying enterprise information provided by computerized analysis of farm business accounts.

Transfer Curriculum Goal(s): none

FBMT 1253 Exploration of Value Added Enterprises
Credits: 2

Prerequisite: none

Co-Requisite: none

This course will provide the student with the basic understanding of what value added enterprises are and how they can affect the farm business. The student will gain the knowledge of various value added enterprises and their relation to a farm management cycle.

Transfer Curriculum Goal(s): none

FBMT 1254 Incorporating Value Added Enterprises
Credits: 2

Prerequisite: none

Co-Requisite: none

This course will provide the student with the knowledge of the farm management cycle with the incorporation of a value added enterprise and the outcomes of the financial and business analysis of the farm.

Transfer Curriculum Goal(s): none

FBMT 1255 Management of Value Added Enterprises
Credits: 2

Prerequisite: none

Co-Requisite: none

This course will provide the student with an in-depth knowledge of management aspects of value added enterprises.

Transfer Curriculum Goal(s): none

FBMT 1260 Environmental Issues on Today's Farm
Credits: 3

Prerequisite: none

Co-Requisite: none

This course will offer the student insights and responsibilities of being a steward of the land. With new environmental policies that are law, the student will learn the necessary requirements to meet the current environmental policies.

Transfer Curriculum Goal(s): none

FBMT 2141 Interpreting and Evaluating Financial Data
Credits: 4

Prerequisite: none

Co-Requisite: none

This course continues to expand on preparation and evaluation of the farm business analysis. This course provides continued guidance and perfection of business record close-out procedures, tax implications of management decisions, and continues to monitor farm business and family goals.

Transfer Curriculum Goal(s): none

FBMT 2142 Interpreting Trends in Business Planning
Credits: 4

Prerequisite: none

Co-Requisite: none

This course examines whole farm, enterprise, balance sheet, and inventory trends. Current analysis data is compared to historical data in making future farm business planning decisions. Financial ratios are used to indicate the farm financial structure.

Transfer Curriculum Goal(s): none

FBMT 2151 Strategies in Farm System Data Management
Credits: 4

Prerequisite: none

Co-Requisite: none

This course will help the student focus on long-term strategies necessary to maintain and enhance the farm business and personal future financial goals. The student will complete the year by developing an accurate, usable business analysis.

Transfer Curriculum Goal(s): none

FBMT 2152 Integrating System Information for Financial Planning
Credits: 4

Prerequisite: none

Co-Requisite: none

This course uses farm system information to develop a farm financial plan. Interpretation and analysis of the farm system data will enhance the reliability of the farm plan. The comprehensive farm plan will integrate historical trends, farm and personal goals, financial and enterprise performance of the farm business.

Transfer Curriculum Goal(s): none

FBMT 2161 Examination of the Context of Farm System Management
Credits: 4

Prerequisite: none

Co-Requisite: none

This course is designed to assist students in preparation of improved farm system management procedures. Students in this course will evaluate several years of an improved farm system analysis.

Transfer Curriculum Goal(s): none

FBMT 2162 Refining Farm System Management
Credits: 4

Prerequisite: none

Co-Requisite: none

This course is the culmination of activities designed to enable the student to develop and implement a comprehensive farm business strategic plan. The student will use the components of the Farm Business Management Program to develop and support a farm business strategic plan.

Transfer Curriculum Goal(s): none

FBMT 2170 Monitoring Farm Commodity Marketing Plans
Credits: 3

Prerequisite: none

Co-Requisite: none

The course is designed to teach students to monitor and refine current farm commodity marketing plans. Emphasis will be placed on current

market conditions and pricing opportunities.

Transfer Curriculum Goal(s): none

FBMT 2171, FBMT 2172

Directed Study - Monitoring Farm Commodity Marketing Plans

Credits: 1

Prerequisite: FBMT 2170

Co-Requisite: none

This course will provide activities directed toward monitoring and refining the student's farm commodity marketing plan.

Transfer Curriculum Goal(s): none

FBMT 2173 Directed Study - Monitoring Farm Commodity Marketing Plans

Credits: 2

Prerequisite: FBMT 2170

Co-Requisite: none

This course will provide activities directed toward monitoring and refining the student's farm commodity marketing plan.

Transfer Curriculum Goal(s): none

FBMT 2180 Strategies in Farm Commodity Marketing

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed to help students plan marketing strategies necessary to achieve farm business and personal goals.

Transfer Curriculum Goal(s): none

FBMT 2181, FBMT 2182 Directed Study - Strategies in Farm Commodity Marketing

Credits: 1

Prerequisite: FBMT 2180

Co-Requisite: none

This course will help students identify and implement marketing strategies necessary to achieve their farm business and personal goals.

Transfer Curriculum Goal(s): none

FBMT 2183 Directed Study - Strategies in Farm Commodity Marketing

Credits: 2

Prerequisite: FBMT 2180

Co-Requisite: none

This course will help students identify and implement marketing strategies necessary to achieve their farm business and personal goals.

Transfer Curriculum Goal(s): none

FBMT 2200 Special Topics - General Farm Management

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses cover special topics of

interest in general farm management.

Transfer Curriculum Goal(s): none

FBMT 2201, FBMT 2202, FBMT 2203, FBMT 2204 Special Topics - General Farm Management

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in general farm management.

Transfer Curriculum Goal(s): none

FBMT 2205, FBMT 2206, FBMT 2207, FBMT 2208, FBMT 2209 Special Topics - General Farm Management

Credits: 2

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in general farm management.

Transfer Curriculum Goal(s): none

FBMT 2210, FBMT 2211, FBMT 2212, FBMT 2213, FBMT 2214, FBMT 2215 Special Topics - Marketing

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in marketing management.

Transfer Curriculum Goal(s): none

FBMT 2216, FBMT 2217, FBMT 2218, FBMT 2219 Special Topics-Marketing

Credits: 2

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in marketing management.

Transfer Curriculum Goal(s): none

FBMT 2220, FBMT 2221, FBMT 2222, FBMT 2223, FBMT 2224 Special Topics - Crops

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in crop management.

Transfer Curriculum Goal(s): none

FBMT 2225, FBMT 2226, FBMT 2227, FBMT 2228 Special topics - Crops

Credits: 2

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in crop management.

Transfer Curriculum Goal(s): none

FBMT 2229 Special Topics - Crops

Credits: 2

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in crop management. This course focuses on the analysis of special topics in oilseed or biofuel crop management, the economics related to cost of production, and the potential for processing the oilseed crop on the farm. On-farm processing of energy crops will result in both a biodiesel supply and a by-product that has been approved for livestock feed in some states. This course will provide basic principles to assist in researching new biofuel crop opportunities, incorporating the energy crop into a normal rotation, and basic economics of production and processing on the farm.

Transfer Curriculum Goal(s): none

FBMT 2230, FBMT 2231, FBMT 2232, FBMT 2233, FBMT 2234 Special Topics - Livestock

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in livestock management.

Transfer Curriculum Goal(s): none

FBMT 2235, FBMT 2236, FBMT 2237, FBMT 2238, FBMT 2239 Special Topics - Livestock

Credits: 2

Prerequisite: none

Co-Requisite: none

These courses cover special topics of interest in livestock management.

Transfer Curriculum Goal(s): none

FBMT 2243 Using Financial Instruments in Farm System Management

Credits: 2

Prerequisite: none

Co-Requisite: none

This course integrates the application of various financial instruments used in acquiring capital for use in the business and investigates the way in which both earnings and financial progress can be measured.

Transfer Curriculum Goal(s): none

FBMT 2253 System Plans and Projections

Credits: 2

Prerequisite: none

Co-Requisite: none

This course enables the combination of concepts for preparing farm system plans and projections, and the interaction of possible implications and/or solutions of these concepts.

Transfer Curriculum Goal(s): none

FBMT 2263 Evaluating Farm System Programs

Credits: 2

Prerequisite: none

Co-Requisite: none

This course develops an awareness of individuals and agencies, both public and private, which have expertise available to assist the farm operator to solve farm systems problems. It enables study and application of farm business evaluation concepts, and exploration of possible implications. Exact subject matter and time spent per topic will vary depending on student need, location, and time.

Transfer Curriculum Goal(s): none

FBMT 2300 Computer Applications in Farm Management

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is intended to have the student enhance their decision-making skills relating to business risk management. This course will have the student further investigate tools available to their business that would be effective in reducing potential risk for their operation. Emphasis will be placed on having the student research risk management options that will meet their business, family, and personal needs.

Transfer Curriculum Goal(s): none

FBMT 2310 Environmental Interactions in Agriculture

Credits: 2

Prerequisite: none

Co-Requisite: none

Transfer Curriculum Goal(s): none

FBMT 2320 Family Wellness and Business Relationships

Credits: 2

Prerequisite: none

Co-Requisite: none

Transfer Curriculum Goal(s): none

FBMT 2325 Ethics in This Business of Agriculture

Credits: 2

Prerequisite: none

Co-Requisite: none

Transfer Curriculum Goal(s): none

FBMT 2330

Business Math Principles

Credits: 2

Prerequisite: none

Co-Requisite: none

Transfer Curriculum Goal(s): none

FBMT 2335

Labor Economics and Management

Credits: 2

Prerequisite: none

Co-Requisite: none

Transfer Curriculum Goal(s): none

Geography

GEOG 1400 Physical Geography

Credits: 3

Prerequisite: none

Co-Requisite: none

Physical Geography examines the earth as a set of subsystems working together to sustain life. Included are studies of the earth as a planet, weather patterns, climates and the resulting distribution of vegetation and soils, as well as plate tectonics, landforms, weathering, and glacial landscapes.

Transfer Curriculum Goal(s): 5,10

GEOG 1410 Maps and Places

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides an introduction to two areas of geographic literacy: Map skills and place name geography. We will study the basic concepts, characteristics and uses of maps, the geographer's most important tool. At the same time we will learn the place names, by region, of the world's countries, important cities and geographical features. The course will be presented through a series of lectures and will include numerous hands-on exercises which often may be completed in class.

Transfer Curriculum Goal(s): 5

GEOG 1421 World Regional Geography

Credits: 3

Prerequisite: none

Co-Requisite: none

World Geography is the study of the world's unique regions. Explore Europe, Russia and her neighbors, Africa, Asia and Latin America through their natural landscapes and resources, cultures, economies and levels of development and their geopolitical importance. Globalization and the global importance of and connections between world regions are emphasized.

Transfer Curriculum Goal(s): 5,8

GEOG 1459 Cultural Geography

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines cultural phenomena as they relate to the world's peoples and places. Cultural Geography studies world population and immigration, folk and popular cultures, the world's great religions, agriculture, political space, economic development and urban and industrial patterns. Connecting these phenomena to the landscapes they create is one of the key features of cultural geography.

Transfer Curriculum Goal(s): 5,8

GEOG 1460 Honors Cultural Geography

Credits: 3

Prerequisite: Admission to the Honors Program

Co-Requisite: none

Cultural geography is the study of cultural phenomena and institutions and their interactions in space. The course will examine human population patterns and migration, religion, agriculture, politics, economic development and urban patterns. This honors course will feature an increased emphasis on the theoretical basis for cultural geography. This will be accomplished in part through the recognition of a variety of cultural groups and the unique landscapes they create. We will examine the ways in which those landscapes reflect and reinforce cultural identity.

Transfer Curriculum Goal(s): 5,8

GEOG 1598 Topics in Geography

Credits: 1-2

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Geography. On demand.

Transfer Curriculum Goal(s): none

GEOG 1599 Topics in Geography

Credits: 1-2

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Geography. On demand.

Transfer Curriculum Goal(s): none

German

GERM 1401 Beginning German I

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is an introduction to the German language, contemporary life, and culture. No previous foreign language study is required. All courses are sequential.

Transfer Curriculum Goal(s): 8

GERM 1402 Beginning German II

Credits: 4

Prerequisite: GERM 1401 or equivalent

Co-Requisite: none

This course is a continuation of GERM 1401.

Transfer Curriculum Goal(s): 8

GERM 2401 Intermediate German I

Credits: 4

Prerequisite: GERM 1402 or equivalent

Co-Requisite: none

This course builds on the skills acquired in the beginning German

sequence. It focuses on a more in-depth use of grammar, conversation, vocabulary development, pronunciation, and composition. Course content reflects the needs of college-age students or professionals living, working, or traveling abroad. Readings of various types are included from newspapers, magazines, literary works, and other cultural sources. Listening, speaking, reading, and writing are all emphasized. All courses are sequential. Course is offered on demand. Transfer Curriculum Goal(s): 8

GERM 2402 Intermediate German II **Credits: 4**

Prerequisite: GERM 2401 or equivalent
Co-Requisite: none
This course is a continuation of GERM 2401.
Transfer Curriculum Goal(s): 8

Global Studies

GLST 1401 Introduction to Global Studies

Credits: 3

Prerequisite: none
Co-Requisite: none
This course introduces students to the basic concepts, trends, perspectives and interconnections of global society. Through readings, discussions, videos, webcasts and other activities, students examine the interdependence of people around the world and global issues that affect these relationships. It will provide an overview of the history and theoretical approaches that have created a global society through topics such as global politics, human rights, the natural environment, population, disease, gender, information technology, war and peace. This is a required course for the Global Studies Emphasis.
Transfer Curriculum Goal(s): 5,8

Health

HLTH 1501 Personal Health and Wellness

Credits: 3

Prerequisite: none
Co-Requisite: none
This course is designed to assist the student to establish a wholesome attitude toward the principles of healthful living and an interest in personal and community health. The students will evaluate health information correctly and work out solutions to immediate health problems to formulate a suitable program for daily living.
Transfer Curriculum Goal(s): none

HLTH 1507 Drug Awareness

Credits: 3

Prerequisite: none
Co-Requisite: none
Study of the use, misuse and abuse of drugs and how it affects our society. Topics reviewed are history, classification of drugs and their effects, first aid treatment and rehabilitation options and laws governing drug use.
Transfer Curriculum Goal(s): none

HLTH 1510 Intro to Massage

Credits: 2

Prerequisite: none
Co-Requisite: none
This course presents basic Swedish technique for a full body massage and includes an overview of the history of massage.
Transfer Curriculum Goal(s): none

HLTH 1531 Women's Health

Credits: 3

Prerequisite: none
Co-Requisite: none
This course approaches healthful living that is specifically related to women. Traditional health topics such as nutrition, exercise, drugs, medical care and environmental health will be covered. Additional topics that have a major impact on women will be covered such as birth control, menstruation, childbearing, menopause and aging, sexuality, body image and violence toward women.
Transfer Curriculum Goal(s): none

HLTH 1541 Human Sexuality

Credits: 3

Prerequisite: none
Co-Requisite: none
A study of human sexuality as it encompasses the physical, mental, emotional, social and spiritual aspects of one's health, relationships and lifestyle. Topics include sexual anatomy and physiology, relationships, gender issues, fertility management, STI's, sexual dysfunction, sexual coercion and commercial sex, as well as healthy sexual expression. Explanation of norms and beliefs will offer opportunities to explain personal values and choices.
Transfer Curriculum Goal(s): none

HLTH 2550 Internship in Health

Credits: 1-4

Prerequisite: none
Co-Requisite: none
Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.
Transfer Curriculum Goal(s): none

HLTH 2570 Topics in Health

Credits: 1-4

Prerequisite: none
Co-Requisite: none
This course will examine selected topics of interest in Health. On demand.
Transfer Curriculum Goal(s): none

Heavy Equipment Operations & Maintenance

HEOM 1101 Safety and First Aid

Credits: 1

Prerequisite: none
Co-Requisite: none
This course covers the elements of construction safety needed for heavy equipment operators. Students will receive their American Red Cross First Aid/CPR/AED certification cards.
Transfer Curriculum Goal(s): none

HEOM 1102 Mechanical Theory

Credits: 1

Prerequisite: none
Co-Requisite: none
This course will cover basic mechanical theories; e.g., how engines work, major external component identification, fuel, lubrication, intake, and cooling systems, power trains, basic hydraulic system and drive train fundamentals. Students will learn principles and various applications on construction equipment to expedite accurate maintenance and service. Service and maintenance manuals will be used as reference resources. This course is necessary for the student, in order to fulfill the technical requirement for the diploma option of the Heavy Equipment Operation and Maintenance Program.
Transfer Curriculum Goal(s): none

HEOM 1107 Tools, Fasteners and Shop Practices

Credits: 1

Prerequisite: none
Co-Requisite: none
This course covers the basics of how to identify and use hand tools, identification and use of power tools, fasteners (standard and metric), course and fine thread, hardness grades, fittings (types and threads), O rings and measuring tools. The student will learn general shop practices for completing assigned shop projects.
Transfer Curriculum Goal(s): none

HEOM 1108 Math/Estimating

Credits: 2

Prerequisite: none
Co-Requisite: none

This course covers construction math applicable to the excavation and grading industry. Earthwork volumes, slopes, conversions and geometric calculations are the primary focus. For entry level operations.

Transfer Curriculum Goal(s): none

HEOM 1110 Preventative Maintenance

Credits: 5

Prerequisite: none

Co-Requisite: none

This course is designed to help students develop common practices that will assist in making them better heavy equipment operators and employees. Students will learn maintenance techniques that minimize unscheduled repairs by investigating how and what to look for. This course helps students learn to identify how to maintain operating costs within a budget.

Transfer Curriculum Goal(s): none

HEOM 1151 HE Welding

Credits: 1

Prerequisite: none

Co-Requisite: none

This course covers basic fundamentals of MIG (wire) welding and ARC welding, oxyacetylene cutting and different applications for heavy equipment.

Transfer Curriculum Goal(s): none

HEOM 1165 CDL

Credits: 3

Prerequisite: Minnesota CDL Permit

Co-Requisite: none

This course covers state standards for a commercial driver's license (CDL) road test.

Transfer Curriculum Goal(s): none

HEOM 1200 Introduction to Operations

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will give the students a brief introduction to various equipment types, their components and controls, pre-start inspections, basic equipment operation and equipment shutdowns. The focus will be on machine controls, component identification, basic operating technique and safety.

Transfer Curriculum Goal(s): none

HEOM 1211 Servicing I

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will teach the student the importance and necessity of doing thorough and complete scheduled

servicing of heavy equipment in accordance with manufacturer's recommendations. Course includes instructor guided servicing on equipment.

Transfer Curriculum Goal(s): none

HEOM 1212 Servicing II

Credits: 2

Prerequisite: HEOM 1211

Co-Requisite: none

This course will teach the student the importance and necessity of doing thorough and complete scheduled services according to manufacturers' recommendations and is a continuation of HEOM 1211 Servicing I.

Transfer Curriculum Goal(s): none

HEOM 1261 General Lab

Credits: 5

Prerequisite: none

Co-Requisite: none

Students will work in a shop setting on a variety of equipment repair projects. Type of projects will depend on machine availability.

Transfer Curriculum Goal(s): none

HEOM 1365 Class A CDL Permit

Credits: 1

Prerequisite: none

Co-Requisite: none

Material to be covered will be the three sections required for the CDL permit: general knowledge, air brakes and combination tractor/trailer as per the Minnesota Commercial Driver's Manual put out by MNDOT.

Transfer Curriculum Goal(s): none

HEOM 2102 Survey/Blueprints

Credits: 5

Prerequisite: HEOM 1108

Co-Requisite: none

This course covers the basic skills needed to identify and apply surveying techniques (mainly elevations and cuts and fills) required for the excavation and grading industry. Blueprint reading as it applies to excavating and grading will be taught to an application level.

Transfer Curriculum Goal(s): none

HEOM 2103 Soils and Compaction

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers common soils used in the construction industry. Soil makeup and characteristics; how soil is compacted, types of equipment and methods used. How compaction equipment produces compactive effort. How soil moisture, density and gradation is tested.

Transfer Curriculum Goal(s): none

HEOM 2110 Backhoe Theory

Credits: 1

Prerequisite: none

Co-Requisite: HEOM 2141, HEOM 2142

This course covers the basic construction and preliminary operation instructions of excavators and tractor-loader-backhoe.

Transfer Curriculum Goal(s): none

HEOM 2111 Loader Theory

Credits: 1

Prerequisite: none

Co-Requisite: HEOM 2140

This course will provide the student the opportunity to learn the values of a high production layout, pit operations, truck operations and loader components.

Transfer Curriculum Goal(s): none

HEOM 2134 Operations Theory

Credits: 1

Prerequisite: none

Co-Requisite: HEOM 2136, HEOM 2138

This course covers machine types, pre-trip maintenance and common operator mistakes. Lecture, visual aids and hands-on training are used in order to instruct student.

Transfer Curriculum Goal(s): none

HEOM 2135 Construction Theory

Credits: 1

Prerequisite: none

Co-Requisite: HEOM 2136, HEOM 2138

This course will give the student a brief overview of correct machine application and use based on current industry standards. Topics addressed but not limited to include: machine application and use, construction best practices, site preparation and road building, and construction site effective communications.

Transfer Curriculum Goal(s): none

HEOM 2136 Grading Lab I

Credits: 5

Prerequisite: none

Co-Requisite: HEOM 2134, HEOM 2135

This course is the hands-on part of crawler dozers, motor graders and scrapers. Safe operations is taught and stressed along with the basic methods of operating these machines. Practice is emphasized with simple projects built individually under the guidance of the instructor. Machine control and care are the goal.

Transfer Curriculum Goal(s): none

HEOM 2138 Grading Lab II

Credits: 4

Prerequisite: none

Co-Requisite: HEOM 2134, HEOM 2135

This course is the next level of operation for crawler dozers, motor graders

and scrapers. More complex projects are attempted with production and multiple machines on projects. Industry standards for quality and production are goals.

Transfer Curriculum Goal(s): none

HEOM 2140 Excavation Lab I

Credits: 3

Prerequisite: none

Co-Requisite: HEOM 2111

This course covers basic construction and operation of bucket type equipment. Various operating methods, techniques and procedures will be covered.

Transfer Curriculum Goal(s): none

HEOM 2141 Excavation Lab II

Credits: 3

Prerequisite: none

Co-Requisite: HEOM 2110

This course covers the basic construction and operation of bucket type equipment. Various operating methods, techniques and procedures will be covered. Students will further their skills on bucket type equipment and go into more detail on techniques used on the job.

Transfer Curriculum Goal(s): none

HEOM 2142 Excavation Lab III

Credits: 3

Prerequisite: none

Co-Requisite: HEOM 2110

This course covers a more advanced level of operation for bucket type equipment. Various operating methods, techniques and procedures will be covered. Students will further develop their skills on bucket type equipment and go into more detail on techniques used on the job. The primary focus at this level is operating in a safe and productive manner and constructing project to within industry standard spec tolerance.

Transfer Curriculum Goal(s): none

HEOM 2150 Competent Person

Credits: 2

Prerequisite: none

Co-Requisite: none

The primary focus of this course is the requirements found on O.S.H.A.'s subpart "P" Excavations. Additional topics covered will be those found in O.S.H.A. standards that pertain to the construction industry. This course allows students participating in the course to receive their O.S.H.A 10 hour construction safety card.

Transfer Curriculum Goal(s): none

HEOM 2350 Operator Internship

Credits: 1-16

Prerequisite: instructor's consent

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

HEOM 2370 Special Topics

Credits: 1-3

Prerequisite: instructor's consent

Co-Requisite: none

This course will examine selected topics of interest in Heavy Equipment. Offered on demand.

Transfer Curriculum Goal(s): none

History

HIST 1406 Western Civilization,

Pre-History to 1500

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will acquaint students with the basic chronological narrative and themes of western civilization to the sixteenth century, a narrative that includes the Hellenistic World, the rise and fall of the Roman Empire, politics, religion and society in the medieval world and the Renaissance.

Transfer Curriculum Goal(s): 5

HIST 1407 Western Civilization,

1500 to Present

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will acquaint students with the basic chronological narrative and themes of western civilization from the sixteenth century, a narrative that includes the Reformation and religious warfare, the Rise of the Modern and centralized European states, the French Revolution, industrialization, and through the atomic era and globalization.

Transfer Curriculum Goal(s): 5

HIST 1412 World History I, From the Beginning to 1500

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will examine the development of world civilizations from pre-history to 1500, and will compare the religion, politics, economy and culture of various world civilizations. Examples will be drawn from Africa, Europe, Asia and the Americas.

Transfer Curriculum Goal(s): 5,8

HIST 1413 World History II, 1500 to Present

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will explore the major developments in world history from 1500 to the present. Topics will include the development of major culture areas and cultural groups that existed in 1500, the influence of European expansion and colonialism, democratic revolutions, industrialization, movements for national liberation, and the rise of the global economy.

Transfer Curriculum Goal(s): 5,8

HIST 1472 U.S. History to 1865

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will acquaint students with the basic chronological narrative and themes of America's past from native North America through the Civil War. Social, political, economic and cultural developments will be covered. A multi-cultural perspective will be incorporated into the course, taking into account those Americans denied access to positions of political and economic power in the past. Analytical skills focusing on reading, writing and use of primary documents will be emphasized.

Transfer Curriculum Goal(s): 5,7

HIST 1473 U.S. History Since 1865

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will survey the history of the American people since Reconstruction. Social, political, economic and cultural developments will be covered. A multi-cultural perspective will be incorporated into the course, taking into account those Americans denied access to positions of political and economic power in the past. Analytical skills focusing on reading, writing and use of primary documents will be emphasized.

Transfer Curriculum Goal(s): 5,7

HIST 1475 Honors U.S. History 1865 to Present

Credits: 3

Prerequisite: Admission to Honors Program

Co-Requisite: none

This course will survey the history of the American people since 1865. Social, political, economic and cultural developments will be covered. A multi-cultural perspective will be incorporated into the course, taking into account those Americans denied access to positions of political and economic power in the past. Analytical skills focusing on reading, writing and use of primary documents will be emphasized. This honors course will

feature an expanded reading load, seminar-style class discussions, and in depth writing assignments.

Transfer Curriculum Goal(s): 5,7

HIST 2404 Minnesota History

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will survey the history of people who have inhabited the land area we know today as Minnesota. Topics will include: Native North Americans, European exploration and the fur trade, early American settlement, Indian and white cultural interactions, post Civil War settlement, the growth of agriculture and industry, protest politics in the 19th and 20th centuries, and an examination of the "People of Minnesota". Minnesota will be a case study in which we will examine many of the historical processes which have shaped the Midwest and indeed much of the United States.

Transfer Curriculum Goal(s): 5

HIST 2411 American Indian History

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of pre-contact Native North America to the present. It will spend time examining the world of Indian peoples before the arrival of Columbus, the invasions of America by Europeans, the fur trade and interactions of Indians and whites during the colonial period, federal Indian policy in the early national period, conflict on the plains, efforts to "Americanize" the American Indian, twentieth century issues including urbanization and relations with the federal government.

Transfer Curriculum Goal(s): 5,7

HIST 2420 History of Women in the U.S.

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will explore the history of women in the United States from pre-European contact to the present. Our topics will be as diverse as are women themselves. We will explore women's changing roles in politics, the law, the labor force, the family and popular culture. The goal of the course is to acquire not just a richer understanding of women's experiences, but also an enhanced understanding of gender and a radically revised historical perspective. Because women differ from each other nearly as much as they differ from men, we will focus throughout the course on the relationships between groups of women divided by

class, by race, and by ethnicity.
Transfer Curriculum Goal(s): 5,7

HIST 2570 Topics in History

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in History. Offered on demand.

Transfer Curriculum Goal(s): none

Horticulture

HORT 1103 Ornamental Trees and Shrubs

Credits: 4

Prerequisite: none

Co-Requisite: none

This course deals with the identification of trees, shrubs, and vines grown in Minnesota. There will be an emphasis on their culture, care, use and classification.

Transfer Curriculum Goal(s): none

HORT 1104 Plant Science

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a survey of the biological considerations for growing and caring of plants. This class will cover plant characteristics, classification, and biology; soil considerations, components, uses, and characteristics; propagation types and strategies of woody and herbaceous plants.

Transfer Curriculum Goal(s): none

HORT 1106 Applied Plant Science Lab

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is a survey of the horticulture industry and its practices. Lab time will be spent touring parts of the industry, interacting with guest speakers from the industry, and examining plants, their parts, and their needs.

Transfer Curriculum Goal(s): none

HORT 1108 Fundamentals of Floral Design

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers floral design principles required to create popular traditional flower arrangements. Mechanics, terms, and basic floral design techniques will be covered. Students will be actively involved in creating floral designs using the principles presented in class. This course also covers the identification, marketable units, handling requirements, and other characteristics of major fresh flowers

and greens used in the floral industry.
Transfer Curriculum Goal(s): none

HORT 1110 Advanced Floral Design

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers the theory and practice of floral designs requiring advanced techniques with emphasis on contemporary design styles. Students will use their lab time to create a variety of arrangements using this knowledge.

Transfer Curriculum Goal(s): none

HORT 1113 Annuals and Perennials

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers the herbaceous and perennial flowering plants grown in the upper Midwest. Particular attention is placed upon identification of the plant materials and the classification of these plants according to cultural requirements and use characteristics. Students will identify the plants by live samples, pressed samples, and photos. A perennial garden and annual garden will be designed.

Transfer Curriculum Goal(s): none

HORT 1118 Indoor Flowering and Foliage Plants

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers identification, characteristics, cultural requirements, and use of potted flowering plants, and indoor foliage plants. The use and characteristics of materials used for permanent plants and containers will also be discussed. Particular attention is placed upon identification and classification of these materials according to cultural requirements and use.

Transfer Curriculum Goal(s): none

HORT 1150 Turf Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the proper establishment and maintenance practices for turfgrasses in the Upper Midwest. Topics include identification of turf, seeding and sodding practices, mowing techniques and equipment, fertilizing, aerating, and proper maintenance of turf.

Transfer Curriculum Goal(s): none

HORT 1180 Sustainable Landscaping

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the principles of sustainable living through our backyards. Students will be exposed to landscaping for wildlife, and shoreline protection from a habitat perspective. They will study the creation and management components of living roofs and walls. Sustainable landscape practices including, but not limited to wind breaks, rain gardens, building budgets and edible landscaping and square foot gardening will also be covered. Students will approach water quality from an environmental prospective down through a human recreational standpoint.
Transfer Curriculum Goal(s): none

HORT 1196 Sustainable Greenhouse Crops

Credits: 4

Prerequisite: none

Co-Requisite: none

This course applies sustainable management and production practices to the controlled environment of a greenhouse. Crops covered include, but are not limited to bedding plants and other floral and food crops with peak production in the winter months. Topics include crop, root media, nutrition, and harvest management decisions as well as monitoring crop development stages. Financial and crop management strategies will be analyzed and put into practice. Greenhouse design, material and equipment selection, and construction will also be a major component of this class.
Transfer Curriculum Goal(s): none

HORT 1300 Fruits and Vegetables

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers those tree, bush, and vine fruit crops which may be grown in Minnesota. Selection, varieties, and cultural practices involved in their growing will be emphasized. The more common vegetables and herbs which are grown in Minnesota are also discussed, with emphasis on cultural methods and current varieties now being grown.
Transfer Curriculum Goal(s): none

HORT 1310 Special Project

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

This course is designed so the student can put into practical use the various skills and knowledge gained in other course work. The course is independent study with no formal class hours.
Transfer Curriculum Goal(s): none

HORT 1345 Internship

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

This course is designed to provide students with an opportunity to work on a full-time basis in some aspect of horticulture.

Transfer Curriculum Goal(s): none

HORT 1398 Topics in Horticulture

Credits: 1-3

Prerequisite: none

Co-Requisite: none

Students will be exposed to many different topics in Horticulture. Some topics will be explored in more depth than they were touched on in other Horticulture classes, some topics are not covered in other Horticulture classes. Most topics will be covered by guest speakers.

Transfer Curriculum Goal(s): none

HORT 1399 Gardens of the World

Credits: 4

Prerequisite: instructor's consent

Co-Requisite: none

This course is a travel experience to selected countries for the purpose of studying the plants, gardens, and culture of those countries. The goal of this experience is to better understand other parts of the world and their influence on the horticulture industry in the United States. Because the horticulture industry is influenced by global production, technology and design trends, this is an opportunity to experience these influences first hand.
Transfer Curriculum Goal(s): none

HORT 2112 Sustainable Greenhouse Production

Credits: 5

Prerequisite: none

Co-Requisite: none

This course prepares students to produce both ornamental and food crops in a controlled environment greenhouse. Special emphasis is placed on management decisions based on economic, environmental, and social sustainability. Traditional greenhouse growing techniques plus advanced technology methods such as hydroponics and aquaponics will be studied and practiced. Topics include growing system requirements, monitoring crop growth and development, variety selection, cultural requirements, nutrient management, and other pertinent information for growing and selling a high quality crop.

Transfer Curriculum Goal(s): none

HORT 2116 Integrated Pest Management

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a study of insects and diseases that have an important economic impact in the fields of horticulture, floriculture, and forestry. It provides an introduction to the theory and practice of solving problems that affect many different types of crops. Management methods include detection, scouting procedures, economic thresholds, and cultural and biological control. Emphasis is also placed on assessing insects and diseases that are common to our crops, backyards, and greenhouses.

Transfer Curriculum Goal(s): none

HORT 2125 Special Occasion/Wedding Design

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is provided for the experienced designer wishing to learn advanced techniques of creating floral designs for weddings, celebrations, and other special occasions. Students will create a variety of arrangements using these techniques.

Transfer Curriculum Goal(s): none

HORT 2140 Arboriculture

Credits: 4

Prerequisite: none

Co-Requisite: none

This course looks at the various aspects of woody vegetation in urban areas. Focus is on the biology and physiology of woody vegetation and the various aspects of field work: pruning, planting, fertilizing, mulching, health evaluation, inventorying and mapping of urban trees.

Transfer Curriculum Goal(s): none

HORT 2150 Retaining Wall and Fence Construction

Credits: 3

Prerequisite: none

Co-Requisite: none

This course presents construction techniques for a variety of retaining walls using several different construction materials. Smaller construction projects such as benches, arbors, and containers will be covered. Students will also learn basic garden pool construction procedures, as well as installation procedures. Practical hands-on training will be provided as much as time and weather permit.

Transfer Curriculum Goal(s): none

HORT 2155 Deck, Patio and Pond Construction
Credits: 4

Prerequisite: none
Co-Requisite: none

This course covers techniques for designing, estimating costs, and building patios and walks, wooden decks, and water gardens. Proper planting, edging, mulching and other installation practices will also be covered. As much as time and weather permits, students will practice actual building and landscape installation techniques. Transfer Curriculum Goal(s): none

HORT 2165 Landscape Design
Credits: 4

Prerequisite: none
Co-Requisite: none

Students will learn to: 1) carefully analyze and integrate client and site information into the landscape design; 2) apply graphic design skills; and 3) develop the ability to assess the visual feel of the design. These skills are developed through the frequent application of graphic and design concepts to landscape design projects. This course is the first of two concentrating on landscape design and is focused on the application of design principles to basic residential and commercial landscape design projects. Transfer Curriculum Goal(s): none

HORT 2170 Advanced Landscape Design
Credits: 4

Prerequisite: HORT 2165
Co-Requisite: none

This course is the second in a series of landscape design laboratory experiences and is focused in advanced design applications for commercial and residential landscape design. The design projects in this course are at a higher level of difficulty and require greater analysis and integration of skills than Landscape Design I. Transfer Curriculum Goal(s): none

HORT 2180 Computer Assisted Landscape Design
Credits: 4

Prerequisite: none
Co-Requisite: none

This course will present information on the use of site Designer LANDCADD, Dynascape, and other landscape design software programs used for creating landscape drawings, pricing structures, and business management decisions. Topics include layout and design, estimating projects, and complete presentation packages. Transfer Curriculum Goal(s): none

HORT 2310 Advanced Special Project
Credits: 1-6

Prerequisite: none
Co-Requisite: none
This course is designed so the student can put into practical use the various skills and knowledge gained in other course work. The course is independent study. Transfer Curriculum Goal(s): none

Machine Trades

MTRD 1160 CNC Setup and Operations
Credits: 4

Prerequisite: none
Co-Requisite: MTRD 1265
This course covers the set-up of tools, setup of the project, installation of a program, and basic operation of a CNC Mill. Transfer Curriculum Goal(s): none

MTRD 1215 Introduction to Milling Operations
Credits: 3

Prerequisite: none
Co-Requisite: none
This course covers theory of setup and operation of vertical and horizontal milling machines, including milling, drilling and reaming techniques. Transfer Curriculum Goal(s): none

MTRD 1221 Introduction to Lathe Operation
Credits: 2

Prerequisite: none
Co-Requisite: none
This course covers basic lathe operation on manual lathes. Students will turn selected projects to size and hold tolerances. Transfer Curriculum Goal(s): none

MTRD 1265 CNC Programming and Process Planning
Credits: 2

Prerequisite: none
Co-Requisite: none
This course will introduce students to CNC programming, setup, and operation utilizing CNC machines in one of the finest, high tech labs in the state. Students will have an opportunity to be very creative in designing projects in a CAD system, and machine their projects on CNC machines to precision accuracy. Transfer Curriculum Goal(s): none

MTRD 1310 Open Lab
Credits: 1-4

Prerequisite: none
Co-Requisite: none
This is an elective course students may take to gain further experience in

manual operation of lathes, mills, and grinders. Transfer Curriculum Goal(s): none

MTRD 1312 Advanced Open Lab
Credits: 1-4

Prerequisite: none
Co-Requisite: none
Transfer Curriculum Goal(s): none

MTRD 2141 Geometric Tolerancing
Credits: 1

Prerequisite: none
Co-Requisite: none
This course covers advanced print interpretation and sketching for the modern machining lab. Transfer Curriculum Goal(s): none

MTRD 2144 Advanced CAD/CAM
Credits: 2

Prerequisite: MTRD 2160
Co-Requisite: none
This course covers advanced training in CAD/CAM and the use of computer assisted software. Transfer Curriculum Goal(s): none

MTRD 2145 Advanced CNC Milling Operations
Credits: 3

Prerequisite: MTRD 2221
Co-Requisite: none
This course covers the programming, set-up, and operation of a machining center. Transfer Curriculum Goal(s): none

MTRD 2147 Advanced CNC Turning Operations
Credits: 2

Prerequisite: MTRD 2223
Co-Requisite: none
This course covers the programming, set-up, and operation of a machining center. Transfer Curriculum Goal(s): none

MTRD 2154 CNC Operations
Credits: 3

Prerequisite: MTRD 1160, MTRD 1215, MTRD 1221, MTRD 1265
Co-Requisite: none
This course is intended to give the student an introduction into the computer numerical control segment of machine tool technology. The student will learn the fundamentals of CNC machines, programming aspects, coordinate systems, word address system, computer download routines, and basic setups. Transfer Curriculum Goal(s): none

MTRD 2160 CAD/CAM
Credits: 3

Prerequisite: 1st semester MTRD courses

Co-Requisite: none
This course covers advanced training in CAD/CAM and the use of computer assisted software.
Transfer Curriculum Goal(s): none

MTRD 2162 Workholding and Fixturing

Credits: 3

Prerequisite: MTRD 1160, MTRD 1215, MTRD 1221, MTRD 1265

Co-Requisite: none

This course will train students to design, build and apply workholding devices and fixtures to hold projects while machining them on a CNC machine.

Transfer Curriculum Goal(s): none

MTRD 2221 CNC Milling Operations

Credits: 5

Prerequisite: MTRD 1160, MTRD 1215, MTRD 1221, MTRD 1265

Co-Requisite: none

This course covers the programming, set-up, and operation of a machining center.

Transfer Curriculum Goal(s): none

MTRD 2223

CNC Turning Operations

Credits: 2

Prerequisite: MTRD 1160, MTRD 1215, MTRD 1221, MTRD 1265

Co-Requisite: none

This course is designed to teach basic programming, setup and operation of a CNC slant bed turning center with a controller. The primary activities are the perform setups and program complex shaped piece parts using internal and external tools.

Transfer Curriculum Goal(s): none

MTRD 2370 Topics in Machine Trades

Credits: 1-4

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Machine Trades technology. Offered on demand.

Transfer Curriculum Goal(s): none

MTRD 2390 Internship

Credits: 1-16

Prerequisite: instructor's approval

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

Management/Marketing

MGMT 1011 Management Principles

Credits: 3

Prerequisite: none

Co-Requisite: none

This course offers a practical look at the management environment, business organizational structure, and the manager's role as planner, organizer, and leader. Topics include a review of the management environment, planning and problem solving tools, staffing, and teamwork.

Transfer Curriculum Goal(s): none

MGMT 1101 Entrepreneurship

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines the risks and rewards of entrepreneurship with a study of the challenges and opportunities of managing a small business for profit.

Transfer Curriculum Goal(s): none

MGMT 1108 Quality and Performance Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of continuous improvement in the quality, productivity, and performance of products and services. A systems approach combining management philosophy, team building, and statistical tools are used to control and improve business processes.

Transfer Curriculum Goal(s): none

MGMT 1110 Frontline Leadership

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an examination of people as the most valuable asset in any business with an emphasis on understanding the leadership role of management and developing core interpersonal skills to deal effectively with employees on the job.

Transfer Curriculum Goal(s): none

MGMT 1114 Human Resource Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course studies the manager's role in working effectively with the human resources of the organization. Emphasis areas include personnel planning, job analysis and design, employee recruitment, selection, training, and employee/management relations.

Transfer Curriculum Goal(s): none

MGMT 1126 Financial Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is the entrepreneur's real world hands-on application of accounting fundamentals simulating the financial management of small service and merchandise businesses. Peachtree and QuickBooks Pro accounting software will be used. While not required, it is recommended that you complete BUSN 1102 before enrolling in this course.

Transfer Curriculum Goal(s): none

MGMT 1150 Entrepreneurship

Capstone

Credits: 1

Prerequisite: BUSN 1102, BUSN 1166, MGMT 1101, and MKTG 1011

Co-Requisite: none

This course centers on the business planning process—opportunity recognition and business concept development. The Business Plan for a new/existing venture includes four major sections. Management and Organization Plan, Product/Service Plan, Marketing Plan, and Financial Plan. Students gain the knowledge, skills, concepts, and strategies relevant for start-up and early-stage entrepreneurs. The practical, hands-on approach encourages students to immerse themselves in the vision, research, and planning aspects of a new/existing venture. Students collaborate with Small Business Development consultants to produce a business plan.

Transfer Curriculum Goal(s): none

MGMT 1312 Business Management Internship

Credits: 1-3

Prerequisite: instructor's consent

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

MKTG 1011 Marketing Principles

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides a foundation of marketing concepts for the student. The course material is designed to develop knowledge of both general and specialized marketing terms. Topics include marketing function, consumer behavior, product strategies, marketing channels, pricing strategies, and promotion.

Transfer Curriculum Goal(s): none

MKTG 1160 Hotel and Resort Operations

Credits: 2

Prerequisite: none

Co-Requisite: none

This individualized independent study course is an introduction to lodging and food service operations. Topics include organization of the hospitality industry, maintenance of hospitality operations, and opportunities within the travel and tourism industry.

Transfer Curriculum Goal(s): none

MKTG 1162 Customer Relations

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will introduce the basics of customer service in the areas of 1) service strategies, 2) attitudes, 3) retention, 4) communication, and 5) sales. The student learns how to 1) create positive memorable experiences for customers, 2) provide consistent caring and professional service, and 3) avoid becoming involved in unproductive customer interactions.

Transfer Curriculum Goal(s): none

MKTG 1164 International Business

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides students with an understanding of the core concepts related to the international environment in which business is conducted today. Students are expected to be able to understand the global economy as well as the structural frameworks that influence an organization's global operations.

Transfer Curriculum Goal(s): none

MKTG 1168 Professional Sales

Credits: 3

Prerequisite: none

Co-Requisite: none

This course concentrates on the techniques in each of the steps of selling and provides the student with the necessary skills to sell a company's products/services to other businesses or the consumer.

Transfer Curriculum Goal(s): none

Marine & Small Engine Technology

MASE 1101 Basic Engines

Credits: 3

Prerequisite: none

Co-Requisite: MASE 1103

This course is designed to provide the basic understanding of the theory and operation of two-stroke and four-

stroke engines.

Transfer Curriculum Goal(s): none

MASE 1103 Basic Engines Lab

Credits: 4

Prerequisite: none

Co-Requisite: MASE 1101

Students will disassemble, test, repair, reassemble, and operate a variety of small engines. Must be taken concurrently with MASE 1101 Basic Engines.

Transfer Curriculum Goal(s): none

MASE 1106 Intro to Electronics

Credits: 2

Prerequisite: none

Co-Requisite: none

The focus of this course is a basic understanding of electricity and electronics using electrical instruments and electronic testing.

Transfer Curriculum Goal(s): none

MASE 1109 Trade and Industry Math

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers an introduction to applied mathematics. Work will be done in percents, decimals and fractions. Lines & angles, two- and three-dimensional shapes, ratio and proportion. An introduction to statistics will also be addressed.

Transfer Curriculum Goal(s): none

MASE 1120 Lawn and Garden

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers chain saws, weed trimmers, and basic drive systems used in lawn and garden equipment. Students will perform maintenance procedures, tune up, and chain saw sharpening.

Transfer Curriculum Goal(s): none

MASE 1130 Marine Outboard I

Credits: 4

Prerequisite: none

Co-Requisite: MASE 1132 and MASE 1134

This course is an introduction to marine power and the theory and operation of an outboard powerhead.

Transfer Curriculum Goal(s): none

MASE 1132 Marine Outboard II

Credits: 4

Prerequisite: none

Co-Requisite: MASE 1130 and MASE 1134

This course covers advanced theory and repair of the electrical systems, carburetion, and tune-up of the outboard engine.

Transfer Curriculum Goal(s): none

MASE 1134 Marine Lower Unit

Credits: 4

Prerequisite: none

Co-Requisite: MASE 1130 and MASE 1132

This course covers the design and operation of lower units on a wide variety of marine engines. Propellers, rigging, and boat performance are also covered in this course.

Transfer Curriculum Goal(s): none

MASE 1140 Snowmobile Systems and Lab

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is designed to provide the student with a growing knowledge of today's modern snowmobile. The emphasis of the course is carburetion, clutches and drive systems, and suspension.

Transfer Curriculum Goal(s): none

MASE 1370 Open Lab I

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This elective course allows students the opportunity to work on individualized projects for college credit. With a plan in place between instructor and student, supervised lab experience is gained in this class.

Transfer Curriculum Goal(s): none

MASE 1371 Open Lab II

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This elective course allows students the opportunity to work on individualized projects for college credit. With a plan in place between instructor and student, supervised lab experience is gained in this class.

Transfer Curriculum Goal(s): none

MASE 2133 Advance Marine

Credits: 3

Prerequisite: MASE 1130, MASE 1132 and MASE 1134

Co-Requisite: none

This course introduces the student to marine stern drives, inboard engines, and controls. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2134 Advance Marine and Personal Water

Credits: 3

Prerequisite: MASE 1130, MASE 1132 and MASE 1134

Co-Requisite: none

This course covers advanced systems in marine such as oil injection, power trim and tilt, steering and remote

controls along with an introduction to personal watercraft vehicles. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2135 Machine Shop

Credits: 2

Prerequisite: MASE 1130, MASE 1132

Co-Requisite: none

This course introduces the student to many of the specialized repairs that are done to MASE engines, such as: cylinder boring, honing, deglazing, and crankshaft repair. For second-year Marine & Small Engine students only. Transfer Curriculum Goal(s): none

MASE 2143 Diagnostic Trouble

Shooting

Credits: 3

Prerequisite: for second year MASE students only

Co-Requisite: none

This course covers diagnostic troubleshooting and repair of fuel, electrical, suspension and drive systems. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2162 ATV Motorcycle Systems I

Credits: 4

Prerequisite: for second year MASE students only

Co-Requisite: none

This course introduces the student to the ATV and small motorcycle engine, clutch, and transmission. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2164 ATV Motorcycle Systems II

Credits: 4

Prerequisite: for second year MASE students only

Co-Requisite: none

This course covers final drives, suspension, tire repair, balancing, and also mechanical and hydraulic brakes that are used on ATV/motorcycles. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2169 MASE Tune Up

Credits: 3

Prerequisite: MASE 1130, MASE 1132 and MASE 1134

Co-Requisite: none

This course allows the student to perform tune-up procedures on MASE equipment that has already been covered. For second-year Marine & Small Engine students only.

Transfer Curriculum Goal(s): none

MASE 2300 Special Project

Credits: 1

Prerequisite: none

Co-Requisite: none

This elective course allows students the opportunity to work on individualized projects for college credit.

Transfer Curriculum Goal(s): none

MASE 2370 Open Lab III

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This elective course allows students the opportunity to work on individualized projects for college credit. With a plan in place between instructor and student, supervised lab experience is gained in this class.

Transfer Curriculum Goal(s): none

MASE 2371 Open Lab IV

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This elective course allows students the opportunity to work on individualized projects for college credit. With a plan in place between instructor and student, supervised lab experience is gained in this class.

Transfer Curriculum Goal(s): none

Math

MATH 0581 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into modules of study that are required as a prerequisite for college level math courses. This course covers whole numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 0582 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into modules of study that are required as a prerequisite for college level math courses. This course covers whole

numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 0583 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into modules of study that are required as a prerequisite for college level math courses. This course covers whole numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 0584 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into modules of study that are required as a prerequisite for college level math courses. This course covers whole numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 0585 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into mod-

ules of study that are required as a prerequisite for college level math courses. This course covers whole numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 0586 Pre-College Math

Credits: 3

Prerequisite: Accuplacer score of 20 or higher on arithmetic exam

Co-Requisite: none

This course is a developmental mathematics course. It is divided into modules of study that are required as a prerequisite for college level math courses. This course covers whole numbers, integers, fractions, decimals, ratio and proportions, percent, measurement, algebraic expressions and equations, geometry and statistics. It also includes operations with real numbers, linear equations, linear inequalities, equations of lines, solving and graphing linear and quadratic equations, systems of equations, exponents and polynomials, concluding with radical expressions, and functions.

Transfer Curriculum Goal(s): none

MATH 1441

Concepts in Mathematics

Credits: 3

Prerequisite: Accuplacer score of 50 or higher on the college level math exam or MATH 1505 or MATH 1506

Co-Requisite: none

This is a college level math course that demands a fundamental algebra background and familiarity with a calculator. Topics include at least four of the following: geometry, trigonometry, graphs, logic, probability, statistics, finance, numeration systems, and set theory.

Transfer Curriculum Goal(s): 4

MATH 1460 Intro to Statistics

Credits: 4

Prerequisite: Accuplacer score of 50 or higher on the college level math exam or MATH 1505 or MATH 1506

Co-Requisite: none

This course covers descriptive statistics, sampling, probability, probability distributions, normal probability distributions, estimates and sample size, hypothesis testing, correlation and

regression, inferences of two samples, and process control.

Transfer Curriculum Goal(s): 4

MATH 1461 Honors Introduction to Statistics

Credits: 4

Prerequisite: Accuplacer score of 50 or higher on the college level math exam or MATH 1505, MATH 1506, and Admission to the Honors Program

Co-Requisite: none

This course covers descriptive statistics, sampling, probability, probability distributions, normal probability distributions, estimates and sample sizes, hypothesis testing, correlation and regression, inferences of two samples, and process control. Much of the content of this course will involve independent learning with classroom lecture involving more in-depth involvement with statistical data. Students enrolled in this course will be required to do additional reading of statistical writings, participate in group projects, present projects to the class, and develop an original survey. Daily assignments will involve use of online homework to accompany the readings from the course. A student must be accepted into the honors program prior to registration.

Transfer Curriculum Goal(s): 2,4

MATH 1470 College Algebra

Credits: 3

Prerequisite: Accuplacer score of 50 or higher on the college-level math exam or MATH 1506

Co-Requisite: none

This course covers topics such as functions and graphs, equations and inequalities, polynomial functions, rational functions, inverse functions, exponential functions, logarithmic functions, sequences and series, systems of equations and inequalities, and problem solving. A graphing approach is used and therefore the use of a graphing calculator will be highly emphasized.

Transfer Curriculum Goal(s): 4

MATH 1472 Precalculus

Credits: 5

Prerequisite: Accuplacer score of 63-85 on the college-level math exam or MATH 1470

Co-Requisite: none

This course is intended to provide the essential mathematical background needed in calculus. Topics include equation solving, functions (polynomial, radical, rational, exponential, logarithmic, trigonometric, and inverse trig), identities, applications, and parametric/polar graphing.

Transfer Curriculum Goal(s): 4

MATH 1477 Calculus I

Credits: 5

Prerequisite: MATH 1472 or Accuplacer score of 86 or higher on college-level math exam

Co-Requisite: none

Review of the concept and properties of a function. Emphasis on the graphing and behavior of a function. Limits are introduced and developed. The derivative of a function is defined and applied to algebraic and trigonometric functions. Anti-differentiation and elementary differential equations. Definite integral as a limit of a sum and as related to anti-differentiation via the Fundamental Theorem of Calculus. Applications to maximum, minimum and related rates. Differentiation and integration of exponential and logarithmic functions.

Transfer Curriculum Goal(s): 4

MATH 1478 Calculus II

Credits: 5

Prerequisite: MATH 1477

Co-Requisite: none

MATH 1478 is a second course in the Calculus of one variable. Topics include differentiation and integration of inverse trigonometric function and hyperbolic function. This course also includes slope fields and first order linear differential equations. Applications of integration will be used to calculate the area between curves, volume using the disk and shell method, arc length and surfaces of revolution, work, moments and centers of mass. It incorporates integration by parts, trigonometry integration, trigonometric substitution, partial fraction, indeterminate forms, L'hospital's Rule and improper integrals. Math 1478 also works with Infinite series, p-series, test for convergence and divergence, Taylor Polynomials and the representation of functions by power series and applications of calculus to parametric and polar equations.

Transfer Curriculum Goal(s): 4

MATH 1500 Applied Mathematics

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides an overview of foundational topics in mathematics. These topics include at least six of the following: numerical properties, percent calculations, calculator usage, problem-solving, estimation, data conversions, real number system, geometry, ratios and proportions, statistics and trigonometry.

Transfer Curriculum Goal(s): none

MATH 1505 Math Pathways

Credits: 3

Prerequisite: Accuplacer score of 52 or higher on Elementary Algebra exam or score of 65 or higher on Arithmetic exam, or completion of MATH 058x (module 8) with a grade of B or higher
Co-Requisite: none

This course will review several pre-algebra topics and introduce topics from elementary algebra, set theory, counting, probability, and basic statistics. Use of the TI-84 Plus graphing calculator will be emphasized in all topic areas. Successful completion of this course will prepare the student for MATH 1441 Concepts of Math and MATH 1460 Introduction to Statistics.
Transfer Curriculum Goal(s): none

MATH 1506 Beginning College Algebra

Credits: 4

Prerequisite: Accuplacer score of 52 or higher on Elementary Algebra exam or score of 65 or higher on Arithmetic exam, or completion of MATH 058x (module 8) with a grade of B or higher
Co-Requisite: none

This course will review many introductory algebra topics as well as introduce some new topics in algebra. Topics taught in this course include linear equations, linear inequalities, equations of lines, graphing, exponents, polynomials, factoring, systems of equations, quadratic equations, rational expressions and equations, complex numbers, radicals, absolute value equations and inequalities, and functions. Additional topics may also be covered.

Transfer Curriculum Goal(s): none

MATH 1510 Math for Elementary Teachers I

Credits: 3

Prerequisite: none
Co-Requisite: none

This is the first of two math courses providing a background for teaching in the elementary school. It emphasizes the use of mathematics manipulatives for modeling the basic operations. Topics will include addition, subtraction, multiplication and division of whole numbers; number theory related to fractions; fractions; decimals; and integers.

Transfer Curriculum Goal(s): none

MATH 1512 Math for Elementary Teachers II

Credits: 3

Prerequisite: none
Co-Requisite: none

This is the second of two math courses providing a background for

teaching in the elementary school. It emphasizes the use of mathematics manipulatives for modeling the basic operations. Topics will include decimals, percents, topology, transformations, geometry, discrete mathematics, probability, and statistics.

Transfer Curriculum Goal(s): none

MATH 1580 Topics in Math

Credits: 1-3

Prerequisite: none
Co-Requisite: none

This course will examine selected topics of interest in Math. Offered on demand.

Transfer Curriculum Goal(s): none

MATH 2457 Linear Algebra

Credits: 3

Prerequisite: MATH 1477
Co-Requisite: none

This course covers systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors.

Transfer Curriculum Goal(s): 4

MATH 2458 Multivariable Calculus

Credits: 4

Prerequisite: MATH 1478
Co-Requisite: none

This course covers vectors, dot and cross products, surfaces; vector-valued functions and curves; functions of several variables, partial and directional derivatives, double and triple integration, line and surface integrals; and applications to extrema, area, volume, moments, and centroids.

Transfer Curriculum Goal(s): 4

MATH 2459 Differential Equations

Credits: 4

Prerequisite: MATH 1478
Co-Requisite: none

This course covers existence and uniqueness theorem; ordinary first order differential equations, linear equations of higher orders, and initial value problems; systems of differential equations, Laplace transforms, and power series methods applications.

Transfer Curriculum Goal(s): 4

Medical Assistant

MEDA 1100 Body Structure and Function I

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is an introduction to the structure and function of the human body from its chemical structure to the organization of the whole body. Focus will be on the study of each

individual organ system and the interaction of each system with the rest of the body. Understanding the medical terminology related to the human body is important. The body systems that will be studied include the integumentary, skeletal, muscular, nervous, sensory, and endocrine systems. Such knowledge is basic to understanding common disease processes. Causes, signs and symptoms of various diseases related to each body system will be studied.

Transfer Curriculum Goal(s): none

MEDA 1105 Body Structure and Function II

Credits: 3

Prerequisite: MEDA 1100
Co-Requisite: none

This course is a continuation of Body Structure and Function I. It will cover the circulatory, lymphatic, respiratory, digestive, urinary and reproductive systems, including the interaction of each system with the rest of the body. Such knowledge is basic to understanding common disease processes. Causes, signs and symptoms of various diseases related to each body systems will be studied.

Transfer Curriculum Goal(s): none

MEDA 1110 Clinical Procedures I

Credits: 3

Prerequisite: CPR certificate
Co-Requisite: none

This course will cover the fundamentals of medical assisting, including medical asepsis, the physical examination, federal regulations, emergencies, patient assessment including vital signs, and documentation skills. Students will learn how to obtain appropriate patient medical information through effective communication.

Transfer Curriculum Goal(s): none

MEDA 1115 Clinical Procedures II

Credits: 3

Prerequisite: MEDA 1110
Co-Requisite: none

This course covers clinical duties that are performed by the medical assistant. Emphasis will be on assisting with ambulatory surgery, assisting with specialty examinations, medication administration, providing patient education, assisting in primary care areas of family practice, internal medicine and obstetrics and gynecology. Students will learn how to obtain appropriate information through effective communication.

Transfer Curriculum Goal(s): none

MEDA 1120 Laboratory Techniques I

Credits: 3

Prerequisite: none

Co-Requisite: MEDA 1100, SECM 1360
This course will focus on safety and regulations in the medical laboratory, introduction to the laboratory, special laboratory tests and urinalysis testing. Students will be responsible for obtaining specimens, testing, and learning to prepare specimens to be sent to an independent laboratory. It is important for medical assistants to be qualified to perform laboratory procedures accurately.
Transfer Curriculum Goal(s): none

MEDA 1125 Laboratory Techniques II Credits: 3

Prerequisite: MEDA 1120
Co-Requisite: none
This course builds on laboratory skills learned from Laboratory Techniques I. Emphasis will focus on basic microbiology, including setting up slides for microscopic analysis of urine and blood, streaking culture plates, performing complete hematology tests. Students will be responsible for obtaining specimens, testing, and learning to prepare specimens to be sent to an independent laboratory. It is important for medical assistants to be qualified to perform laboratory procedures accurately.
Transfer Curriculum Goal(s): none

MEDA 1130 Ethics and Issues Credits: 1

Prerequisite: none
Co-Requisite: none
This course will cover legal and ethical issues as they relate to the medical field. The importance of legal knowledge to medical office personnel, standard of care, HIPPA, negligence, malpractice, and informed consent represent some of the topics that will be discussed.
Transfer Curriculum Goal(s): none

MEDA 1132 Phlebotomy Credits: 2

Prerequisite: Concurrent enrollment with MEDA 1110 and MEDA 1120
Co-Requisite: none
This course will cover the collection of patient blood specimens and processing for testing. Various methods of collection will be taught and practiced. Students will be expected to participate both as a phlebotomist and as a patient. Difficult draws, adverse reactions and pediatric patients will also be discussed and simulated. The specimens collected will be handled and processed according to laboratory standards for accurate testing.
Transfer Curriculum Goal(s): none

MEDA 1135 Administrative Procedures I Credits: 3

Prerequisite: none
Co-Requisite: none
This course covers administrative duties that are performed by the medical assistant. Emphasis will be on understanding the facility environment, computers in the ambulatory care setting, telecommunications, patient scheduling, medical records management, written communications, and medical documents, including electronic medical records.
Transfer Curriculum Goal(s): none

MEDA 1137 Administrative Procedures II Credits: 2

Prerequisite: MEDA 1135
Co-Requisite: none
This course is a continuation of the Administrative Procedures I duties that are performed by the medical assistant. Emphasis will be on understanding medical insurance and necessary coding for billing, daily financial practices, billing and collections, accounting practices, and the role of the medical assistant as an office and human resources manager.
Transfer Curriculum Goal(s): none

MEDA 1145 Fundamentals of Radiographic Imaging Credits: 2

Prerequisite: SECM 1360
Co-Requisite: none
This course will prepare students for the MN State Examination for Limited X-ray Operators. It will give students an overview of radiology technology and the importance it plays in the medical field. Students will be provided with the necessary information to understand medical terminology as related to radiology, the proper use of x-ray equipment, the principles of radiation safety with protection to both the operator and the patient, and the importance of safe working habits. Students will gain knowledge of common radiographic procedures, including technique and patient positioning.
Transfer Curriculum Goal(s): none

MEDA 2150 Medical Assistant Internship Credits: 6

Prerequisite: instructor's consent
Co-Requisite: none
This course will provide on-the-job experience to students. The student will be assigned to work in a physician's office for a total of 270 clock hours. The student will work under the supervision of office personnel doing tasks related to the student's program

curriculum.

Transfer Curriculum Goal(s): none

MEDA 2155 Certification Exam Review Credits: 1

Prerequisite: instructor's consent
Co-Requisite: none
This course will be a review to prepare the student to sit for the national certification examination. The course will include a review of theory learning in the classroom, including administrative, clinical, and laboratory skills. The student will also be expected to study outside of the class to prepare for this exam.
Transfer Curriculum Goal(s): none

Military Technologies

MILS 1500 Work Experience in Military Leadership Credits: 1-4

Prerequisite: instructor's consent
Co-Requisite: none
This course will cover the following topics: Review of the work experience agreement protocols, development of job-related behavioral learning objectives, preparation of required program forms/paperwork, resolving any of job-related problems that arise as part of the work experience, ongoing conferences with instructor-coordinator and work supervisor, and a written report of outcomes based on the learning objectives.
Transfer Curriculum Goal(s): none

Music

MUSC 1403 American Popular Music Credits: 3

Prerequisite: none
Co-Requisite: none
This course is a tour of musical elements, from blues and jazz to country, rock and pop from 1900 to the present, which contributed to the development of the music we listen to today.
Transfer Curriculum Goal(s): 6

MUSC 1405 Jazz Band I Credits: 1

Prerequisite: none
Co-Requisite: none
This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a Jazz Band setting. The group prepares and performs traditional and contemporary Jazz literature in public performance with one concert per semester and other public performances as opportunities present.
Transfer Curriculum Goal(s): 6

MUSC 1406 Jazz Band II

Credits: 1

Prerequisite: none
Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a Jazz Band setting. The group prepares and performs traditional and contemporary Jazz literature in public performance with one concert per semester and other public performances as opportunities present.

Transfer Curriculum Goal(s): 6

MUSC 1408 Community Band I

Credits: 1

Prerequisite: none
Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a concert band setting. The group prepares and performs traditional and contemporary band literature in public performance with one concert per semester.

Transfer Curriculum Goal(s): 6

MUSC 1409 Community Band II

Credits: 1

Prerequisite: none
Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a concert band setting. The group prepares and performs traditional and contemporary band literature in public performance with one concert per semester.

Transfer Curriculum Goal(s): 6

MUSC 1415 Brass Ensemble I

Credits: 1

Prerequisite: none
Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a brass ensemble setting. The group prepares and performs traditional and contemporary brass ensemble literature in public performance with one concert per year plus public performances in varying venues as opportunities arise.

Transfer Curriculum Goal(s): 6

MUSC 1416 Brass Ensemble II

Credits: 1

Prerequisite: none
Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a brass ensemble

setting. The group prepares and performs traditional and contemporary brass ensemble literature in public performance with one concert per year plus public performances in varying venues as opportunities arise.

Transfer Curriculum Goal(s): 6

MUSC 1421 Cantare' Concert

Chorale I

Credits: 1

Prerequisite: none
Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 1422 Cantare' Concert

Chorale II

Credits: 1

Prerequisite: none
Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 1431 Chamber Singers I

Credits: 1

Prerequisite: none
Co-Requisite: none

This is a mixed choral ensemble that rehearses and performs various vocal styles of music such as chamber, madrigal, jazz, American pop, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, productive group rehearsals, and participation in one or more public performances per semester are the objectives of this course. This course is open to all students with some prior vocal experience, and there will be a brief voice audition by the instructor the first week of class.

Transfer Curriculum Goal(s): 6

MUSC 1432 Chamber Singers II

Credits: 1

Prerequisite: none
Co-Requisite: none

This is a mixed choral ensemble that rehearses and performs various vo-

cal styles of music such as chamber, madrigal, jazz, American pop, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, productive group rehearsals, and participation in one or more public performances per semester are the objectives of this course. This course is open to all students with some prior vocal experience, and there will be a brief voice audition by the instructor the first week of class.

Transfer Curriculum Goal(s): 6

MUSC 1441 Applied Music - Guitar I

Credits: 1

Prerequisite: none
Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1442 Applied Music - Guitar II

Credits: 1

Prerequisite: none
Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1450 Music in World Cultures

Credits: 3

Prerequisite: none
Co-Requisite: none

This course will study the music of different cultures in the context of human life. Students will be introduced to the music and customs of diverse cultures such as African, Latin, Bosnian, Indian, and many others. Class activities will include music listening and playing of multicultural instruments, guest speakers and performers, and other projects that enhance the ethno musicological awareness of the many differences and similarities of non-Western and Western hemisphere indigenous cultures.

Transfer Curriculum Goal(s): 6,8

MUSC 1452 Intro to Music Industry

Credits: 3

Prerequisite: none

Co-Requisite: none

This class focuses on the study of the music industry including music in the marketplace, songwriting, publishing, copywriting, licensing, merchandizing, recording, music management, agents, unions and guilds, television, radio and career development. In addition, it focuses on the ethical questions inherent in each of these areas such as intellectual property rights, (illegal downloading) artistic responsibility (effects of content on listeners), artistic restrictions, (Wal-Mart effect, censorship), industry monopolies (Clear Channel Radio, corporate ownership of public media).

Transfer Curriculum Goal(s): 6,9

MUSC 1453 Audio Recording I

Credits: 3

Prerequisite: basic music reading and computer skills

Co-Requisite: none

This course leads students through introductory audio recording software elements in Protools, a comprehensive digital audio recording, editing, and mixing software. The techniques studied are set in the context of giving voice to artistic expression through the medium of recorded sound.

Transfer Curriculum Goal(s): 6

MUSC 1455 Voice Training

Credits: 2

Prerequisite: none

Co-Requisite: none

This course offers class instruction for the experienced and the inexperienced singer, covering the basic fundamentals of voice training, vocal building exercises and activities, and improving confidence in the student's vocal ability. Students will learn vocal health tips and become familiar with various vocal styles such as jazz, classic, pop, musical theater, and folk. This course also offers exposure to guest artists, one private vocal consultation with the instructor, and other vocal building activities. Students are not required to do solo performances, but there will be opportunities to do so throughout the semester.

Transfer Curriculum Goal(s): 6

MUSC 1457 Music Appreciation

Credits: 3

Prerequisite: none

Co-Requisite: none

This class is the study of all types of music from classical to rock and roll. Students will learn the many differences and similarities of diverse styles of music through music listening, group activities, guest performers,

concerts, musical theater productions and other projects that enhance the understanding and appreciation of all kinds of music past and present.

Transfer Curriculum Goal(s): 6

MUSC 1459 Fundamentals of Music

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the basics of music theory, aural perception, and sight singing. Emphasis is placed on rhythmic exercises, notation, tonality, phrase structure, simple form, fundamental harmony, and basic keyboard facility.

Transfer Curriculum Goal(s): 6

MUSC 1464 Applied Music - Brass I

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1465 Applied Music - Brass II

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1475 Applied Music - Woodwind I

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1476

Applied Music - Woodwind II

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1481 Applied Music - Piano I

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1482 Applied Music - Piano II

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1485 Applied Music - Instrumental I

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1486**Applied Music - Instrumental II****Credits: 1**

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1491 Applied Music - Voice I**Credits: 1**

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 1492 Applied Music - Voice II**Credits: 1**

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2401 Evolution of Jazz**Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is a survey of the history of Jazz from its roots to today including musical styles, musicians, historical and social contexts of the various styles and times. Included in this are pre-jazz elements, New Orleans Dixieland, Chicago Dixieland, Swing, Bop, Cool, Hard Bop, Free Jazz, Fusion and Avant-garde and the present day manifestations of these styles, the social, racial and historical relations between the music and the times.

Transfer Curriculum Goal(s): 6,7

MUSC 2405 Jazz Band III**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a Jazz Band setting. The group prepares and performs traditional and contemporary Jazz literature in public performance with one concert per semester and other public performances as opportunities present.

Transfer Curriculum Goal(s): 6

MUSC 2406 Jazz Band IV**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a Jazz Band setting. The group prepares and performs traditional and contemporary Jazz literature in public performance with one concert per semester and other public performances as opportunities present.

Transfer Curriculum Goal(s): 6

MUSC 2408 Community Band III**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a concert band setting. The group prepares and performs traditional and contemporary band literature in public performance with one concert per semester.

Transfer Curriculum Goal(s): 6

MUSC 2409 Community Band IV**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a concert band setting. The group prepares and performs traditional and contemporary band literature in public performance with one concert per semester.

Transfer Curriculum Goal(s): 6

MUSC 2415 Brass Ensemble III**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a brass ensemble

setting. The group prepares and performs traditional and contemporary brass ensemble literature in public performance with one concert per year plus public performances in varying venues as opportunities arise.

Transfer Curriculum Goal(s): 6

MUSC 2416 Brass Ensemble IV**Credits: 1**

Prerequisite: none

Co-Requisite: none

This performing group encompasses age levels from high school to adult and musicianship levels from intermediate to expert in a brass ensemble setting. The group prepares and performs traditional and contemporary brass ensemble literature in public performance with one concert per year plus public performances in varying venues as opportunities arise.

Transfer Curriculum Goal(s): 6

MUSC 2421 Cantare' Concert**Chorale III****Credits: 1**

Prerequisite: none

Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 2422 Cantare' Concert**Chorale IV****Credits: 1**

Prerequisite: none

Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 2423 Cantare' Concert**Chorale V****Credits: 1**

Prerequisite: none

Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal

excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 2424 Cantare' Concert Chorale VI

Credits: 1

Prerequisite: none

Co-Requisite: none

Cantare Concert Chorale is a mixed choral group that rehearses and performs diverse styles of music such as classical, jazz, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, collaborative group participation, successful and inspiring concert performances, and a love for singing are the objectives of this course.

Transfer Curriculum Goal(s): 6

MUSC 2431 Chamber Singers III

Credits: 1

Prerequisite: none

Co-Requisite: none

This is a mixed choral ensemble that rehearses and performs various vocal styles of music such as chamber, madrigal, jazz, American pop, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, productive group rehearsals, and participation in one or more public performances per semester are the objectives of this course. This course is open to all students with some prior vocal experience, and there will be a brief voice audition by the instructor the first week of class.

Transfer Curriculum Goal(s): 6

MUSC 2432 Chamber Singers IV

Credits: 1

Prerequisite: none

Co-Requisite: none

This is a mixed choral ensemble that rehearses and performs various vocal styles of music such as chamber, madrigal, jazz, American pop, multicultural, musical theater, and more. Achieving vocal excellence and choral blend, productive group rehearsals, and participation in one or more public performances per semester are the objectives of this course. This course is open to all students with some prior vocal experience, and there will be a brief voice audition by the instructor the first week of class.

Transfer Curriculum Goal(s): 6

MUSC 2441

Applied Music - Guitar III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2442

Applied Music - Guitar IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2464

Applied Music - Brass III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2465

Applied Music - Brass IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2475

Applied Music - Woodwind III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2476

Applied Music - Woodwind IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2481 Applied Music - Piano III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2482

Applied Music - Piano IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified(brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2485 Applied Music - Instrumental III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2486

Applied Music - Instrumental IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2491 Applied Music - Voice III

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2492

Applied Music - Voice IV

Credits: 1

Prerequisite: none

Co-Requisite: none

These courses provide 30 minute private lessons with the instructor once a week covering basic music knowledge and performing skills on the medium specified (brass, woodwind, instrumental, piano, voice, guitar). Skills and literature will be specific to the instrument and individual level of the student. One studio recital performance per semester.

Transfer Curriculum Goal(s): 6

MUSC 2580 Topics in Music

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Music. Offered on

demand.

Transfer Curriculum Goal(s): 6

Natural Resources

NATR 1106 Intro to Natural Resources Law

Enforcement

Credits: 2

Prerequisite: none

Co-Requisite: none

This course will cover the role that law enforcement plays in managing natural resources, as well as basic field equipment (i.e., binoculars, spotting scopes, blinds, etc.) used in the process. Discussions will be held with local conservation officers to learn about their jobs and the roles they play within the Natural Resources community. Ethical considerations to prevent harm to the individual animal and still have a quality viewing experience will also be covered.

Transfer Curriculum Goal(s): none

NATR 1112 Land Measurement

Credits: 3

Prerequisite: none

Co-Requisite: none

This course develops skills in legal descriptions, pacing, and chaining, using compasses, maps, aerial photos, and connects to our Introduction to GPS/GIS class. It involves field-work each week to develop these skills and includes learning to read and write legal descriptions from plat maps, as well as learning to use topographic maps, aerial photos, and creating maps, both by hand and computer. Differential leveling using old style transits are discussed, demonstrated and practiced along with chaining techniques used in measuring parcels of land. With the transit, learning to read the leveling rod as well as the horizontal and vertical verniers are also a part of this process. Some plot work that ties in with dendrology, plant taxonomy and other classes may also be done to help the students further develop their skills in compassing pacing and reading legal descriptions, as well as their overall understanding as to how all of this relates to any particular Natural Resource occupation.

Transfer Curriculum Goal(s): none

NATR 1115 Plant Taxonomy

Credits: 2

Prerequisite: none

Co-Requisite: none

This course involves learning to identify vascular plants as well as develop an understanding for their morphology through dissection. The course

will discuss botanical nomenclature, vegetative terminology, botanical descriptions, collecting and preserving, and a survey of vascular plant families. We will also discuss the use of keys.

Transfer Curriculum Goal(s): none

NATR 1120 Dendrology

Credits: 3

Prerequisite: none

Co-Requisite: none

The course focus is on the characteristic features of trees and shrubs and the purpose of these features. Students will be able to readily identify 60 to 70 species of trees and shrubs by Latin (family, genus and species) and Common names found within the U.S. They will learn to use various keys to identify trees and shrubs with. Key features for study will include: leaves, twigs, buds, flowers, fruit, stem and bark. Most of our studies will be of trees in Minnesota, and the Eastern U.S. However, we will discuss Southern and Western species as well.

Transfer Curriculum Goal(s): none

NATR 1125 Ichthyology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will review the biology, ecology, and identification of fish, with special emphasis on Minnesota fish. Students will explore taxonomy and evolutionary relationships of fish, anatomy and physiology, life history, diversity, behavior, and ecology of fish. Lab sessions will introduce students to the more than 150 species of fish native to Minnesota with emphasis on taxonomy and identification.

Transfer Curriculum Goal(s): none

NATR 1130 Mammalogy

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the identification and biology of mammals. Students learn taxonomic relationships, evolution, basic anatomy and life history. Labs focus on identification by pelage and skull characteristics, age and sex criteria, and small mammal trapping and handling.

Transfer Curriculum Goal(s): none

NATR 1135 Ornithology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers the identification, biology, and ecology of birds in Minnesota. Students will learn basic anatomy and life history, as well as family and species characteristics and songs.

Labs emphasize identification of Minnesota birds.

Transfer Curriculum Goal(s): none

NATR 1140 Limnology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course develops basic knowledge in the study of freshwater systems. It discusses the physical, chemical and biological characteristics of streams and lakes; as well as the influence of water in our environment and the ecology related to organisms and ecosystems through which it flows. The importance of aquatic productivity is also considered.

Transfer Curriculum Goal(s): none

NATR 1150 Aquatic Invertebrate Ecology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will review the taxonomy, diversity and life histories of aquatic macro-invertebrates in the upper Midwest. Ecological relationships of aquatic invertebrates with water quality and fisheries will also be investigated. Measures and metrics for determining the health of macro-invertebrate communities and ecological health will be covered.

Transfer Curriculum Goal(s): none

NATR 1152 Field Methods in Freshwater Studies

Credits: 2

Prerequisite: NATR 1140 or NATR 1150 or NATR 1125

Co-Requisite: none

This course will place students directly in the field collecting and interpreting aquatic data. Through this course, students may collect water samples, inventory aquatic vegetation, assess aquatic invertebrate communities, or map watersheds. Students will also work with cooperating agencies, lake associations, or LUGs to schedule sampling, present results, or provide other elements of customer service.

Transfer Curriculum Goal(s): none

NATR 1200 Introduction to Natural Resources

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will develop an holistic awareness of our Natural Resources. Includes information in Forestry, Fisheries, Wildlife and Parks & Recreation, as well as Soils and Water. Ideas and attitudes that revolve around Conservation and Preservation and their

historical background are discussed, and each area of resource concern is followed up with careers in that particular field often with guest speakers that work in those areas or students that have participated in summer internships.

Transfer Curriculum Goal(s): none

NATR 1280 Introduction to GPS and GIS

Credits: 2

Prerequisite: none

Co-Requisite: none

The objective of this class is to provide students with an introductory understanding of GIS software (ArcGIS 10.0) and GPS technology. The main emphasis will be on learning practical applications for the software. Lectures will provide examples of GIS techniques, how the processes work and the applications for which they may be used. The laboratory will provide hands-on training to learn various GIS processes which will focus on collecting, organizing, managing, analyzing, and presenting spatial data.

Transfer Curriculum Goal(s): none

NATR 1300 Summer Field Experience

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a trip type of experience mainly for Natural Resource Students and Environmental Science Students. It involves presentations from DNR personnel and other agencies as well as camping, canoeing and backpacking at various locations from Mille Lacs Kathio to Lake Superior, and the BWCA from Ely to Grand Maris.

Transfer Curriculum Goal(s): none

NATR 1302 Fall Field Experience

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This is an elective course mainly for students in the Natural Resources program, but is open to other students. The course will involve chainsaw safety and certification, along with 10 hours of service learning/natural resource work. Six hours will be through The Nature Conservancy and the other four hours will be during a camping trip to Itasca State Park. The service learning work will include trail maintenance, fire prevention, seed collection, budcapping, and plant survival checks.

Transfer Curriculum Goal(s): none

NATR 1305 Winter Field Experience

Credits: 1

Prerequisite: none

Co-Requisite: none

This course helps the student develop an understanding for working outdoors in adverse conditions; and the importance of working as a team. It develops an understanding for hypothermia and knowledge of winter first aid. The course discusses preparing for and spending a night out in the field; going over equipment, clothing, food and water, and how to pack and pull a sled. And – most important – having a good time and enjoying the Winter Environment.

Transfer Curriculum Goal(s): none

NATR 1310 Internship

Credits: 1-8

Prerequisite: none

Co-Requisite: none

This course is designed to provide students with an opportunity to work on a full time basis in some aspect of environmental management.

Transfer Curriculum Goal(s): none

NATR 1315 Basic Wildland Fire S-130, S-190

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is a combination of the S-130, S-190 Basic Firefighter training taught by the DNR and U.S. Forest Service personnel. It is a federal course that all wildland fire fighters must take to be hired on fire crews. It includes basic fire weather, fire equipment, and basic fire suppression tactics. Students completing the class will receive a federal certificate to allow them to be hired on various fire crews.

Transfer Curriculum Goal(s): none

NATR 1340 Special Project

Credits: 1-4

Prerequisite: none

Co-Requisite: none

This course is designed so the student can put into practical use the various skills and knowledge gained in other course work. The course is independent study with no formal class hours.

Transfer Curriculum Goal(s): none

NATR 1341 Seminar

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will introduce students to the variety of disciplines and topics included in natural resource management through weekly presentations, field trips, readings, multimedia, and active discussions. Students will also explore elements of communicating

effectively in groups using oral, written, and multimedia presentations and will create their own presentations.

Transfer Curriculum Goal(s): none

NATR 1360 Animal Behavior

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers interspecific and intraspecific dynamics that allow animals to be successful in a natural world. This information is critical in making animal observations and interpreting what you see in order to understand the well-being of the animal. Transfer Curriculum Goal(s): none

NATR 2110 Herpetology

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is an introductory class in Herpetology, that covers classification, and characteristics of amphibians and Reptiles, that include the different kinds frogs, salamanders, turtles, lizards, and snakes. Discussion of the species of Minnesota is an important aspect of this course, but many other species are included as well. Transfer Curriculum Goal(s): none

NATR 2120 Wetland Ecology

Credits: 3

Prerequisite: BIOL 2416, NATR 1140

Co-Requisite: none

This course covers the biological, physical, and chemical interactions in wetlands. It includes delineation, classification systems, and plant and animal identification. Transfer Curriculum Goal(s): none

NATR 2130 Wildlife Management

Credits: 3

Prerequisite: none

Co-Requisite: none

The course covers the biological principles that form the basis of current wildlife management, management techniques, and societal factors affecting management decisions. Topics include population dynamics, management techniques, non-game and endangered wildlife, and conservation biology. Transfer Curriculum Goal(s): none

NATR 2140 Fisheries Management

Credits: 3

Prerequisite: NATR 1125, NATR 1140

Co-Requisite: none

This course covers the basic concepts of modern fisheries management with special emphasis on aquatic ecology, watershed and habitat management,

exotic species, and laws and regulations. Also included in laboratory activities are principles of fisheries population dynamics and management, with special emphasis on population estimation, age and growth analysis, mortality estimation, and recruitment and yield. Transfer Curriculum Goal(s): none

NATR 2155 Soil Science

Credits: 3

Prerequisite: none

Co-Requisite: none

The course is designed to give students an awareness of soil characteristics and techniques to evaluate physical and chemical properties. Practical uses of soil information and soil conservation techniques will be emphasized. Physical and chemical analysis, soil survey techniques and soil conservation practices are included in the lab. Transfer Curriculum Goal(s): none

NATR 2160 Watershed Management

Credits: 3

Prerequisite: NATR 1280

Co-Requisite: none

This course will review the role watersheds play in water quality in lakes and rivers. The effects of land use practices, hydrology, infrastructure development, and development will all be explored. The roles various governmental units play in the watershed will also be investigated. Students will utilize GIS and GPS applications in exploring watershed influences in lab activities. Transfer Curriculum Goal(s): none

NATR 2161 Ecosystem Management

Credits: 2

Prerequisite: NATR 1140, NATR 1200, NATR 2120

Co-Requisite: none

This course is designed to assess the ecological and social factors of ecosystem management. Students will prepare a management plan after collecting ecosystem data and resolving conflicting objectives. Transfer Curriculum Goal(s): none

NATR 2170 Advanced GPS/GIS

Credits: 2

Prerequisite: NATR 1280

Co-Requisite: none

The objective of this class is to provide you with an advanced understanding of GIS software (ArcGIS 9.3) and GPS technology. The main emphasis will be on learning practical applications for the software. Lectures will provide examples of GIS techniques, how the processes work and for what applica-

tions they may be used. The laboratory will provide hands-on training to learn various GIS processes which will focus on collecting, organizing, managing, analyzing, and presenting spatial data. Transfer Curriculum Goal(s): none

NATR 2201 Introduction to Parks and Interpretation

Credits: 2

Prerequisite: NATR 1200

Co-Requisite: none

This is a holistic course on the importance of parks and outdoor recreation. It will discuss the basic areas of management, such as our natural resources, people, facilities, law enforcement, and finances. It will also touch on topics such as the foundation of outdoor recreation, psychology and the natural environment, the social aspects and economics of outdoor pursuits, and federal, state and local management policies and agencies. The course will also cover various curriculums available for the naturalist (Project Wild, Project Wild Aquatic, Project Learning Tree, and Nature Scope). The class will visit or have a presentation by local park managers to see and discuss how they are used by the public. The student will prepare and teach selected topics with the class and with elementary students in the area. Transfer Curriculum Goal(s): none

NATR 2235 Silviculture and Forest Management

Credits: 3

Prerequisite: NATR 1120, NATR 1112

Co-Requisite: none

This course is a combination of lecture and lab designed to familiarize students with basic silvicultural techniques and forest management considerations needed to take care of today's forests. Topics include cultural techniques used in harvesting, thinning, TSI (Timber Stand Improvement) and regeneration. Management considerations for wildlife, watershed, and recreation will be discussed as well. Other topics of discussion will include yearly management and allowable cut information. Transfer Curriculum Goal(s): none

NATR 2321 Ecological Classification of Native Plant Communities

Credits: 2

Prerequisite: NATR 2155 and NATR 1115

Co-Requisite: none

This course will train students in the use of soils and herbaceous vegetation to identify native plant communities for use in land management, surveying, or research. Extensive

field trips will be taken throughout the course to identify different plant communities across Minnesota and investigate the ecological succession of these communities. Students will also use the natural history of native plant communities to develop forest management guidelines.

Transfer Curriculum Goal(s): none

Nursing

NURS 2500 Professional Concepts and Issues in Nursing

Credits: 2

Prerequisite: NURS 2501

Co-Requisite: none

This course examines the complexity of the professional role in nursing and focuses on the roles of leadership and management, delegation and supervision, teaching, ethical and legal concepts in nursing practice, and the processes of critical thinking and synthesis. This course focuses on the many roles of the professional nurse and builds on all previously learned concepts as the student develops their own art and science of nursing. Current trends and issues in nursing will be researched and shared.

Transfer Curriculum Goal(s): none

NURS 2501 Adaptation to Health and Illness Through The Lifespan I

Credits: 6

Prerequisite: admission to ADN Program

Co-Requisite: NURS 2513

The first course in a two-semester sequence emphasizing use of the nursing process to assess, plan, and implement nursing interventions to support adaptations to individuals, families and groups during interferences with physiological, psychosocial, sociocultural, spiritual and developmental integrity. Concepts related to teaching/learning needs in the RN role in providing education to prevent, preserve, and restore health are presented. Content includes caring for clients across the lifespan. This course focuses on the following units/systems: nursing process, teaching and learning, peri-operative care, fluid and electrolyte/acid-base balance, genitourinary system, cardiovascular system, respiratory system, the normal childbearing family, pharmacology, and mental health and illness.

Transfer Curriculum Goal(s): none

NURS 2502 Adaptation to Health and Illness Through The Lifespan II

Credits: 6

Prerequisite: NURS 2501

Co-Requisite: NURS 2514

This course follows and builds upon Nursing 2501. Complexity of concepts increases and includes content related to application of Nursing Process, human adaptive mechanisms, sexuality issues in health and illness, nursing care of pediatric and aging adult clients, safety needs in health and illness, nursing needs related to select body systems (those not covered in Nursing 2501). Content includes caring for clients across the lifespan. This course focuses on the following units/systems: endocrine system, musculoskeletal function, immune system and oncology, neurological function, digestive and gastrointestinal function, integumentary and sensory neural function, child health maintenance and high-risk childbearing family nursing care.

Transfer Curriculum Goal(s): none

NURS 2513 Nursing Practicum I

Credits: 3

Prerequisite: admission to ADN Program

Co-Requisite: none

Clinical lab component that focuses on the application of the nursing process, including assessment, planning, intervention, and evaluation with individuals across the lifespan experiencing acute and chronic illness, families experiencing childbearing, and individuals and families in dysfunction. Clinical sites may include acute care settings, as well as clinics and various community service agencies. Pass/Fail grading.

Transfer Curriculum Goal(s): none

NURS 2514 Nursing Practicum II

Credits: 3

Prerequisite: NURS 2513

Co-Requisite: none

Clinical lab component that focuses on integration of knowledge, skills, and theory principles with continued emphasis on the nursing process. Additional course emphasis includes applying leadership skills including prioritization, delegating, supervising, and management components necessary to transition to the graduate RN role. Clinical sites may include acute care settings, as well as clinics and various community service agencies. Pass/Fail grading.

Transfer Curriculum Goal(s): none

NURS 2520 LPN to RN:

Role Transition

Credits: 1

Prerequisite: admission to ADN Program

Co-Requisite: none

This course is designed to build on

concepts, knowledge and skills attained in a practical nursing program. Role differences between the LPN and RN, including scope of practice, are discussed. This course begins to integrate the application of concepts of role transition for the AD nursing student, including advanced communications skills, critical thinking, educator role, and nursing leadership and management skills. Selected RN psychomotor skills and thought processes area taught in a safe, realistic learning environment. The goal is to provide exposure to actual clinical situations that will increase confidence in the clinical setting and in the RN role transition. This course focuses on hands on application of practice transition from the LPN to the RN through assignments, testing, practice, demonstration and simulation.

Transfer Curriculum Goal(s): none

NURS 2522 Dosage Calculations

Credits: 1

Prerequisite: admission to ADN Program

Co-Requisite: none

This course offers a basic review of math and ratio/proportion as applied by health care professionals. Topics include the metric system, preparation of solutions, pediatric dosage, I.V. solutions, and advanced I.V. titration of medications. Application will be made through subsequent nursing courses.

Transfer Curriculum Goal(s): none

NURS 2525 AD Progression Proficiency

Credits: 1

Prerequisite: admission to ADN Program

Co-Requisite: none

Designed for students needing AD Nursing course work remediation to meet proficiency expectations for program re-admission and progression. The specific theory topics include: nursing process, fluid and electrolytes, pharmacology, mental health, normal obstetrical and newborn care, and the respiratory, cardiovascular and genitourinary systems. The specific nursing lab topics/skills include: head-to-toe physical assessment, nursing documentation and giving oral report, medication administration including IV push meds, IV piggy backs, central line IV push meds, starting an IV, central line dressing change, blood administration and completion of three clusters of nursing activities in given scenario situations.

Transfer Curriculum Goal(s): none

Nursing Assistant

NSGA 1110 Nursing Assistant

Credits: 3

Prerequisite: none

Co-Requisite: none

The Nursing Assistant course introduces concepts of basic human needs, health/illness continuum and basic nursing skills. Skills are demonstrated and practiced in a supervised laboratory setting environment. This course also allows for practical application of skills developed and practiced in the nursing laboratory setting. Students will demonstrate learned skills under the supervision of their instructor in a nursing care setting. This course meets State and Federal requirements for placement on the State and Federal requirements for placement on the State Registry. Students must complete with a grade of C or better to pass this course. Attendance is mandatory, no more than 4 hours may be missed.

Transfer Curriculum Goal(s): none

NSGA 1115 Home Health Aide

Credits: 1

Prerequisite: NSGA 1110

Co-Requisite: none

This course introduces the skills and knowledge required of the Home Health Aide-Homemaker.

Transfer Curriculum Goal(s): none

Occupational Skills

OSKL 1103 Topics in Occupational Skills

Credits: 1

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Occupational Skills. On demand.

Transfer Curriculum Goal(s): none

OSKL 1142 Communication I

Credits: 3

Prerequisite: none

Co-Requisite: none

Students are exposed to curriculum focusing on verbal, written and non-verbal communication skills utilized on the job and in the community. Topics covered include telephone skills, self advocacy skills, self esteem, understanding written schedules, manners and etiquette, and body language.

Transfer Curriculum Goal(s): none

OSKL 1144 Critical Reasoning

Skills I

Credits: 4

Prerequisite: none

Co-Requisite: none

Students learn about decision making and problem solving skills used in the workplace and in their personal life. Topics covered include accessing community services, personal safety and maintenance skills, responding to emergencies and workplace safety, budgeting/consumer skills and citizenship, nutrition and meal preparation. Students will also be required to participate in a minimum of 5 hours of Service Learning, as well as a student club or organization.

Transfer Curriculum Goal(s): none

OSKL 1146

Critical Reasoning Skills II

Credits: 3

Prerequisite: OSKL 1144

Co-Requisite: none

Students learn about decision making and problem solving skills used in the workplace and in their personal life. Topics covered include: relationship choices and dynamics, Stress and anger management techniques, goal setting, time management and development of personal filing system. Students will also be required to participate in a minimum of 5 hours of Service Learning, as well as a student club or organization.

Transfer Curriculum Goal(s): none

OSKL 1148 Employability Skills I

Credits: 3

Prerequisite: none

Co-Requisite: none

Students learn skills needed to seek and maintain entry-level competitive employment. Skills covered include: self advocacy skills at work, development of interpersonal skills with employer, co-workers and customers, adapting to the worksite and demonstrating personal accountability at the worksite and exploration of entry-level job opportunities to solidify job goals.

Transfer Curriculum Goal(s): none

OSKL 1150 Employability Skills II

Credits: 4

Prerequisite: OSKL 1148

Co-Requisite: none

Students learn skills needed to find, secure and maintain employment. Topics covered include how to find employment, successful job application and interviews, and adapting to employer needs while maintaining the job. Students participate in job club at the end of the semester to assist with

the job seeking process.

Transfer Curriculum Goal(s): none

OSKL 1154

Supervised Pre-Internship I

Credits: 4

Prerequisite: none

Co-Requisite: OSKL 1152

This course utilizes a college or community worksite to perform job skills needed to maintain entry-level employment. Students will secure employment or participate in a paid or non-paid experience established by OSP department or employment secured by student with OSP department approval. Limited (1-2 days) job coaching is available for students enrolled in this course. Specific training goals are developed for each student with the employer based on student needs.

Transfer Curriculum Goal(s): none

OSKL 1156

Supervised Pre-Internship II

Credits: 4

Prerequisite: none

Co-Requisite: none

This course utilizes a college or community worksite to build on the skills learned in Employability Skills I. This course utilizes a college or community worksite to perform job skills needed to maintain entry-level employment. Students will secure employment or participate in a paid or non-paid experience established by OSP department or employment secured by student with OSP department approval. Job coaching is available as needed for students enrolled in this course. Specific training goals are developed for each student with the employer based on student needs. Students work 12 hours per week.

Transfer Curriculum Goal(s): none

OSKL 1162 Study Skills I

Credits: 1

Prerequisite: none

Co-Requisite: none

Students learn skills related to manage their time and improve organizational skills at the worksite and in the community. Skills taught include time management, personal planner usage, and using task lists. Students also work in groups with a tutor to clarify assignments given in other OSP courses.

Transfer Curriculum Goal(s): none

OSKL 1164 Study Skills II

Credits: 1

Prerequisite: OSKL 1162

Co-Requisite: none

Students learn skills related to man-

age their time and improve organizational skills at the worksite and in the community. Skills taught include time management, personal planner usage, and using task lists. Students also work in groups with a tutor to clarify assignments given in other OSP courses.

Transfer Curriculum Goal(s): none

OSKL 1166 Communication II

Credits: 3

Prerequisite: OSKL 1142

Co-Requisite: none

Students are exposed to experiences focusing on diversity, verbal, written, electronic and non-verbal communication skills utilized on the job and in the community.

Transfer Curriculum Goal(s): none

Ojibwe

OJIB 1401 Beginning Ojibwe I

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers the language of the Ojibwe. Emphasis to be placed on linguistics and phonetics to familiarize the student with the language. Written and oral skills, non-linguistic aspects of the cultural background and surroundings are also explored. Must be taken in sequence or with the consent of the instructor. Course is offered on demand.

Transfer Curriculum Goal(s): 8

OJIB 1402 Beginning Ojibwe II

Credits: 4

Prerequisite: OJIB 1401

Co-Requisite: none

This course covers the language of the Ojibwe. Emphasis to be placed on linguistics and phonetics to familiarize the student with the language. Written and oral skills, non-linguistic aspects of the cultural background and surroundings are also explored. Must be taken in sequence or with the consent of the instructor. Course is offered on demand.

Transfer Curriculum Goal(s): 8

OJIB 2401 Intermediate Ojibwe I

Credits: 4

Prerequisite: OJIB 1402

Co-Requisite: none

This course is a continuation of OJIB 1402 and continues to develop Ojibwe language skills. Emphasis is on linguistics and phonetics. Cultural background and surroundings are explored.

Transfer Curriculum Goal(s): 8

OJIB 2402 Intermediate Ojibwe II

Credits: 4

Prerequisite: OJIB 2401

Co-Requisite: none

This course is a continuation of OJIB 1402 and continues to develop Ojibwe language skills. Emphasis is on strengthening linguistics and phonetics. Cultural background and surroundings are explored.

Transfer Curriculum Goal(s): 8

OJIB 2500 Conversational Ojibwe

Credits: 3

Prerequisite: OJIB 2402

Co-Requisite: none

This course is designed to promote oral communication in the language. Grammar review and vocabulary building are structured to the needs of the students.

Transfer Curriculum Goal(s): none

Philosophy

PHIL 1411 World Religions

Credits: 3

Prerequisite: none

Co-Requisite: none

This course offers a framework for understanding the diversity of beliefs found in the modern world. Major religious traditions such as Hinduism, Buddhism, Judaism, Islam and Christianity are examined, with special attention paid to historical development and examination of fundamental beliefs from both metaphysical and ethical perspectives.

Transfer Curriculum Goal(s): 6,9

PHIL 1415 Philosophy and Popular Culture

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will examine ways in which a variety of popular sources—films, novels, music, television—can offer insights into compelling philosophical questions such as the nature of knowledge, the meaning of reality, what it means to live ethically, and the meaning and possibilities of justice. Philosophical ideas and questions provide a pervasive underpinning for much of our popular culture. And, equally importantly, popular culture increasingly presents itself as the platform for shared discourse within our society and the world.

Transfer Curriculum Goal(s): 6

PHIL 1417 Immortality and the Afterlife

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines concepts of the afterlife, personal survival and immortality from the perspectives of

religion, philosophy and science. Examination of afterlife beliefs of major world religions will include detailed investigation of concepts of paradise, physical resurrection, reincarnation, and cosmic unity. Philosophical arguments for and against survival as well as analysis of theories of self and mind as seen from the perspectives of dualism, materialism, hypophenomenalism and functionalism will be examined in terms of their relationship to various types of survival, contemporary views derived from near death experiences, quantum physics and probability will also be considered.

Transfer Curriculum Goal(s): 2,6

PHIL 1421 Critical Thinking

Credits: 3

Prerequisite: none

Co-Requisite: none

This course helps students develop analytical and reasoning skills that will permit them to more effectively understand and discern the logical content of various types of persuasive communication, which will empower them to: 1) defend themselves from deceptive arguments and attempts to persuade, as well as 2) to more precisely clarify and evaluate their own thoughts, beliefs, values and goals. Students will learn about uses and misuses of language, common cognitive errors, recognition and formal analysis of good and bad arguments, and how to articulate and critically assess moral implications of claims.

Transfer Curriculum Goal(s): 2,9

PHIL 1460 Logic

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the basic concepts, principles, and methods of argument analysis and evaluation, including deductive and inductive reasoning, validity, soundness, truth tables, Aristotelian logic, Venn diagrams, indirect deductive proofs, and principles of induction.

Transfer Curriculum Goal(s): 2,4

PHIL 2410

Introduction to Philosophy

Credits: 3

Prerequisite: none

Co-Requisite: none

This is a first course in philosophy explains what it means to be a philosopher and to think philosophically about questions that aren't immediately answerable. Possible topics include the nature of reality, idealism, the difference between a priori and empirical knowledge, values, social

philosophy, and the value of philosophy from any answers it may provide. Transfer Curriculum Goal(s): 2,6

PHIL 2420 Ethics

Credits: 3

Prerequisite: none
Co-Requisite: none

Course content will include discussion and analysis of what results when one attempts to think philosophically about questions of morality and value. This course will examine issues of moral motivation and responsibility, and explore an array of possible answers to questions of right and wrong, and good and bad by looking at classical and contemporary moral theories. It will involve responding through discussion forums, class activities, and writing assignments or tests. Transfer Curriculum Goal(s): 6,9

PHIL 2421 Honors Ethics

Credits: 3

Prerequisite: Admission to the Honors Program

Co-Requisite: none

The purpose of this course is to examine a variety of contemporary moral issues from a philosophical standpoint and to explore some of the many approaches and methods that can be used to clarify our thinking about these and other ethical issues, as well as to assist us in making reasoned moral judgments.

Transfer Curriculum Goal(s): 6,9

PHIL 2430 Contemporary Moral

Problems

Credits: 3

Prerequisite: none
Co-Requisite: none

The purpose of this course is to examine a variety of contemporary moral issues from a philosophical standpoint and to explore some of the many approaches and methods that can be used to clarify our thinking about these and other issues, as well as to assist us in making reasoned moral judgments.

Transfer Curriculum Goal(s): 6,9

Photo Technology

PHIM 1114 Digital Darkroom

Credits: 4

Prerequisite: none
Co-Requisite: none

This course focuses on the use of image editing software as it applies to digital photography. Students will develop skills in Adobe Creative Suites software. Workflow issues will also be discussed.

Transfer Curriculum Goal(s): none

PHIM 1119 Matting and Framing

Credits: 3

Prerequisite: none
Co-Requisite: none

Students learn to “finish” images using folders, frames, matting, lamination, and spray. A variety of skills are used to fit industry needs.

Transfer Curriculum Goal(s): none

PHIM 1120 Media Productions

Credits: 3

Prerequisite: none
Co-Requisite: none

This focus of this course is corporate communication and the creation of single and multiple images using DSLR cameras. Equipment capabilities, HD video, visual storytelling, exposure control, production, and concepts of marketing are also involved in this course.

Transfer Curriculum Goal(s): none

PHIM 1122 Photo Composition

Credits: 2

Prerequisite: none
Co-Requisite: none

This course focuses on developing “picture-taking” skills, perspective and composition. Students learn principles of visual art, Gestalt psychology, compositional value, elements of design, varying perspective, and digital camera controls. Students reinforce their learning through printing their own images.

Transfer Curriculum Goal(s): none

PHIM 1160

Basic Photo and Processing

Credits: 3

Prerequisite: none
Co-Requisite: none

The focus of this course is to instruct students in general skill of image capture and output. Single lens reflex cameras, processing and printing variables, black and white and color materials, and practices of quality control are covered. This course provides traditional darkroom experience as well as basic digital photography training. Transfer Curriculum Goal(s): none

PHIM 1164 Survey of Imaging

Credits: 2

Prerequisite: none
Co-Requisite: none

The focus of this course is the study of the Imaging industry in general. Students study key players of photography (capture & output), graphics, reprographics, and video to develop a historical perspective of the industry, which corresponds to the current marketplace. An assessment of workplace competencies is given, which

provides a starting point for additional instructional assessment, for each individual in the program.

Transfer Curriculum Goal(s): none

PHIM 1172 Photo Printing Systems

Credits: 4

Prerequisite: none
Co-Requisite: none

The focus of this course is to learn about imaging systems of output or printing. Chemistry, ink, and dye sublimation equipment will be operated. Topics of study include color theory (visual light and pigment theory), quality control, product standards, workflow, and problem solving. This course also provides students with an introduction into print matting techniques and presentation.

Transfer Curriculum Goal(s): none

PHIM 1174 Studio Photographics

Credits: 4

Prerequisite: none
Co-Requisite: none

The focus of the course is the operations and material used in a photographic studio and lab. Lighting, Digital SLR cameras, medium format cameras, light metering, posing and print production are topics of study.

Transfer Curriculum Goal(s): none

PHIM 1176 Visual Relationships

Credits: 3

Prerequisite: none
Co-Requisite: none

The focus of this course is visual art expressed through the medium of photography. Topics of study include: image capture and output, posing technique, lighting technique, design, matting/framing anatomy and presentation, typography, color relationships as expressed through use of a color wheel, and related topics. Students will be assessed in workplace competencies. No prerequisite — although PHIM 1122 Photo Composition is helpful.

Transfer Curriculum Goal(s): none

PHIM 1199 Special Topics

Credits: 1-6

Prerequisite: instructor’s consent
Co-Requisite: none

This course is an independent study which focuses on “special projects” selected by the student or by the instructor. Projects are designed to help a student perfect mastery in an area, gain additional experiences and to grow in specific areas of workplace competencies. Coursework is setup for full-time students that have completed one full semester of study. Students discuss the project with the

instructor to establish meeting dates, outcomes, and deadlines. Excellent time management is a must. Projects which require use of special lab materials may require an additional lab fee. This course is available only by instructor consent.
Transfer Curriculum Goal(s): none

PHIM 1284

Digital and Video Photographics

Credits: 4

Prerequisite: none

Co-Requisite: none

The focus of this course is digital capture, output, and related software. Students build upon previous knowledge to incorporate advanced topics in camera control, lighting, photographic printing, production, and software found in Adobe Creative Suites.
Transfer Curriculum Goal(s): none

PHIM 1310 Portrait Photography

Credits: 3

Prerequisite: none

Co-Requisite: none

The focus of this course is the art of photographing people in a studio environment. Concepts of posing, basic lighting and modifiers are common topics. Students are encouraged to work with a photo laboratory service as a customer. This is an elective course and may be taken in an independent setting with instructors consent.
Transfer Curriculum Goal(s): none

PHIM 1315 Commercial Imaging

Credits: 3

Prerequisite: none

Co-Requisite: none

This course provides students with additional lab time, instruction, critique, or experience in such photographic interest areas of product, nature, industrial, fine art, or glamour photography. Students must have a working knowledge of a professional SLR camera, lighting, and be able to work independently off campus. This is an elective course and may be taken in an independent setting with instructor consent.
Transfer Curriculum Goal(s): none

PHIM 1316 Creative Camera/Dark-room

Credits: 3

Prerequisite: none

Co-Requisite: none

The focus of this course is for the student to work with the digital photography process and techniques. Adobe Photoshop Light room software will be used in a digital photography setting. This is an elective course and may be taken in an independent set-

ting with instructors consent.

Transfer Curriculum Goal(s): none

PHIM 1368 Image Editing

Credits: 2

Prerequisite: none

Co-Requisite: none

The focus of this course is an introduction to the use of image editing software such as Photoshop and Photoshop Elements. Tool functions, file handling, retouching, image manipulation and printing techniques are topics addressed.

Transfer Curriculum Goal(s): none

PHIM 1390 Internship

Credits: 1-3

Prerequisite: instructor's approval

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

PHIM 2110 Color Management Systems

Credits: 4

Prerequisite: PHIM 1160

Co-Requisite: none

This course covers information and tools used in color balancing and digital systems are discussed topics. Students will take the Society of Photographic Engineers exam, an industry standard. A laptop computer is required.

Transfer Curriculum Goal(s): none

PHIM 2111 Art Direction

Credits: 4

Prerequisite: PHIM 1114, PHIM 1122, PHIM 1160, PHIM 1172

Co-Requisite: none

The purpose of this course is to provide an opportunity for art directors and photographers to work together to create product. Students will demonstrate learned skills in photography, software, composition, lighting and color. Effective communication and information sharing skills are also covered.

Transfer Curriculum Goal(s): none

PHIM 2112 Fine Art Printing

Credits: 4

Prerequisite: PHIM 1114, and PHIM 1222 or PHIM 1160 or PHIM 1172

Co-Requisite: none

The focus of this course is to gain knowledge and experience in problem solving in computers, software, printing and production systems used in photographic applications.

Transfer Curriculum Goal(s): none

PHIM 2175 Photographic Certification and Business

Credits: 4

Prerequisite: PHIM 1114, PHIM 1122, PHIM 1160, PHIM 1172

Co-Requisite: none

This course provides the student with additional lab time and instruction. Students fine-tune skills necessary for success in a chosen area of the industry, namely photo imaging operations, or management, photography, imaging workflow, or equipment service. Students select or are assigned projects that simulate real job situations.

Transfer Curriculum Goal(s): none

PHIM 2276 Photo Economics

Credits: 3

Prerequisite: PHIM 1160, PHIM 1172

Co-Requisite: none

This focus of this course is the preparation of personal presentation as it relates to employment. Students evaluate the economic condition of the industry, evaluate niche markets, and develop employment strategies as they pertain to an individual's goals. A cost-of-doing-business analysis, American culture, organizational change, applied microeconomic terminology, an overview of macro economics as it refers to firms, and business philosophy, are likely topics of discussion.

Transfer Curriculum Goal(s): none

PHIM 2286 Outdoor Photography

Credits: 2

Prerequisite: none

Co-Requisite: none

This is an advanced course in photography which provides students opportunity to photograph in various outdoor lighting situations. Composition and capture skills are practiced and fine-tuned. Aerial photography may be also introduced. Students must have the flexibility to travel and spend additional time in the field and know how to operate output equipment for creating gallery displays.

Transfer Curriculum Goal(s): none

PHIM 2296 Corporate Communication and Presentations

Credits: 4

Prerequisite: none

Co-Requisite: none

The focus of this course is the development of a student portfolio, prepare gallery imagery, and to provide additional matting, framing and laminating experiences. Students are assigned projects that provide experiences that assist them in the current marketplace. Topics in business and marketing are often discussed.

Transfer Curriculum Goal(s): none

PHIM 2320 Capture and Output

Credits: 2

Prerequisite: none

Co-Requisite: none

The focus of this course is to develop introductory “picture-taking” and computer enhancement skills. During this process, students will learn how to link their camera exposures with their personal computer to share images in various mediums. In addition to single images, basic principles of video capture and output will also be discussed. This class is an elective course.

Transfer Curriculum Goal(s): none

Physical Education

PHED 1502 Circuit Training

Credits: 2

Prerequisite: none

Co-Requisite: none

This is a course designed to develop cardio-respiratory endurance, flexibility, muscle endurance and muscle strength. A circuit of selected weight machines and aerobic stations will be used. It allows each individual an appropriate starting point and rate of progression.

Transfer Curriculum Goal(s): none

PHED 1503 Advanced Circuit Training

Credits: 1

Prerequisite: none

Co-Requisite: none

This is a follow-up course to PHED 1502 that provides an opportunity to expand on a personal fitness routine. More emphasis is placed on muscular strength and intensity of workout.

Transfer Curriculum Goal(s): none

PHED 1505 Fitness Walking

Credits: 2

Prerequisite: none

Co-Requisite: none

This course emphasizes the basics of fitness and conditioning with regard to cardio fitness. Students will begin at their level of fitness and work at their own speed.

Transfer Curriculum Goal(s): none

PHED 1506 Aerobic Exercise

Credits: 2

Prerequisite: none

Co-Requisite: none

This is a course emphasizing cardio respiratory endurance using aerobic dance patterns, kicking and punching moves from kickboxing, and interval training. Topics covered include proper warm-up, cool-down and stretching techniques. Heart rate and/or level of

intensity are measured daily.

Transfer Curriculum Goal(s): none

PHED 1507 Basic Horsemanship

Credits: 2

Prerequisite: none

Co-Requisite: none

This course introduces the would be rider to the horse as a companion and partner in the equestrian process. Emphasis is placed on safety, balance and communication between horse and rider. A service learning component may be added with instructor approval to work with the Mounted Eagles.

Transfer Curriculum Goal(s): none

PHED 1508 Bicycling

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is designed to stimulate interest in cycling as a recreational activity and its contribution to the physical well-being of the participant. Must furnish own cycle.

Transfer Curriculum Goal(s): none

PHED 1510 Beginning Skiing/Snowboarding

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is an introduction to the basics of downhill (alpine) skiing. Clothing, equipment selection and safety will be discussed and demonstrated. Basic techniques of snow-plowing, tow ropes and chair lifts will be taught. Extra fee will be collected. Additional time outside of class will be required.

Transfer Curriculum Goal(s): none

PHED 1511 Advanced Skiing/Snowboarding

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is for experienced skiers/snowboarders to enhance their skills on the slopes. Safe practices, controlling turns, learning to jump and maneuver in the terrain park will be covered. Students will have a chance to teach/assist others.

Transfer Curriculum Goal(s): none

PHED 1512 Beginning Yoga

Credits: 2

Prerequisite: none

Co-Requisite: none

This course introduces yoga poses (asanas), relaxation, and breathing techniques. The practice of yoga promotes proper posture, strength, flexibility and stress relief for people of all ages and abilities. Yoga is a non-

competitive activity.

Transfer Curriculum Goal(s): none

PHED 1513 Aerobic Conditioning

Credits: 2

Prerequisite: none

Co-Requisite: none

This is an overview of various training techniques for aerobic conditioning. An elevated heart rate will be achieved daily through interval training, circuit training, calisthenics, yoga poses, and cardio machines. Students will monitor their improvement in cardiovascular fitness.

Transfer Curriculum Goal(s): none

PHED 1514 Cardio Sampler

Credits: 2

Prerequisite: none

Co-Requisite: none

This course offers an aerobic sampler. We will split up into different sections. Every few weeks the aerobic style will change from traditional step aerobics to resistance aerobics, Boso Ball aerobics, boot camp aerobics, and callisthenic aerobics.

Transfer Curriculum Goal(s): none

PHED 1520 Advanced Yoga

Credits: 2

Prerequisite: none

Co-Requisite: none

A course for students with previous yoga experience. Knowledge of basic standing poses and relaxation techniques are recommended. Expertise in strength and flexibility is not required, but students should be generally fit. Students will be encouraged to explore yoga theory. More advanced asanas/poses will be practiced with emphasis on more strength poses, including inversions.

Transfer Curriculum Goal(s): none

PHED 1521 Body Conditioning

Credits: 2

Prerequisite: none

Co-Requisite: none

This course provides progressive fundamental conditioning of the body for health and strength through systematic use of free weights.

Transfer Curriculum Goal(s): none

PHED 1522 Weight Training

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is an advanced course in body conditioning and training with the use of free weights.

Transfer Curriculum Goal(s): none

PHED 1523 Strength Training for Women

Credits: 2

Prerequisite: none

Co-Requisite: none

This course is an introduction to the weight room and its uses as well as a comprehensive approach to strength training for women of all ages.

Transfer Curriculum Goal(s): none

PHED 1524 Recreational Sampler**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course will introduce a wide variety of recreational pursuits in the lakes area and the opportunity to try a number of them in an instructional and safe setting. The goal is to assist students in finding enjoyable, lifelong pursuits that add quality to their lives.

Transfer Curriculum Goal(s): none

PHED 1525 Personal Protection Awareness**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course teaches the physical and mental aspects of self-defense, relating to citizens. Students will learn to recognize threats and respond appropriately. This is not traditional martial arts. It is a no-nonsense, practical self-defense system. Emphasis is placed on clear thinking, effective strategy, and physical techniques. These concepts are critical to personal protection.

Transfer Curriculum Goal(s): none

PHED 1530 Beginning Swimming**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is designed for non-swimmers and very beginning swimmers. The focus is to assist the student to become more comfortable and confident in and around the water. Basic safety skills and use of life jackets are taught. The individual should be able to float and do a basic stroke by the end of the course.

Transfer Curriculum Goal(s): none

PHED 1531 Intermediate and Advanced Swimming**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is designed for individuals with some swimming ability and is comfortable in deep water. Individual strokes will be taught and practiced. By the end of the course the student should have improved their form and increased their endurance in several different swim strokes.

Transfer Curriculum Goal(s): none

PHED 1534 Beginning Golf**Credits: 2**

Prerequisite: none

Co-Requisite: none

This is a course for those interested in learning the fundamentals of golf. Emphasis will be placed on proper footwork, approach, delivery, and scoring. Rules and etiquette governing play will be stressed.

Transfer Curriculum Goal(s): none

PHED 1536 Advanced Golf**Credits: 2**

Prerequisite: none

Co-Requisite: none

This is a course for those interested in learning the fundamentals of golf. Emphasis will be placed on proper footwork, approach, delivery, and scoring. Rules and etiquette governing play will be stressed.

Transfer Curriculum Goal(s): none

PHED 1541 Bowling**Credits: 2**

Prerequisite: none

Co-Requisite: none

This is a course for those interested in learning the fundamentals of bowling. Emphasis will be placed on proper footwork, approach, delivery, and scoring. Rules and etiquette governing play will be stressed.

Transfer Curriculum Goal(s): none

PHED 1544 Basketball - Coed**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course provides the basic skills and strategies of competitive basketball. Emphasis will be placed on proper passing, shooting, and defensive techniques, as well as rules of the game. Individual skills and team play will be covered.

Transfer Curriculum Goal(s): none

PHED 1553 Power Volleyball**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course provides the basic skills and strategies of competitive volleyball. Emphasis will be placed on proper passing, setting and hitting techniques, as well as rules of the game. Individual and team play will be covered.

Transfer Curriculum Goal(s): none

PHED 1570 Theory of Coaching**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course presents the theory and techniques of coaching competitive

sports. The fundamental concepts and basic trends in the field of coaching will be presented. Coaching history, philosophy, psychology, pedagogy, and physiology, will be examined and analyzed.

Transfer Curriculum Goal(s): none

PHED 1572 Theory of Basketball**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course provides a detailed study of individual and team skills, and practice and game strategies. Topics covered will include coaching philosophy, motivation, sports psychology, and solving problems unique to basketball coaching.

Transfer Curriculum Goal(s): none

PHED 1573 Officiating**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course will present the techniques, rules, and procedures for officiating a selected sport—volleyball, basketball, football, baseball, or softball—in any given semester.

Transfer Curriculum Goal(s): none

PHED 1583 Athletic Training**Credits: 2**

Prerequisite: none

Co-Requisite: none

This course covers prevention, care, taping techniques of ankles, knees, wrist, fingers etc. and rehabilitation of athletic injuries.

Transfer Curriculum Goal(s): none

PHED 1594 Fitness for Life**Credits: 2**

Prerequisite: none

Co-Requisite: none

This is a course for students of all ages that covers all aspects of exercise and physical fitness. The focus is on self-evaluation and personal program planning. Exercise quackery, guidelines for exercise and the health benefits of exercise will be discussed. Other topics such as nutrition, stress management, and life styles for healthy living are also covered.

Transfer Curriculum Goal(s): none

PHED 1599 Topics in Physical Education**Credits: 1-3**

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in physical education. Offered on demand.

Transfer Curriculum Goal(s): none

PHED 2501 Varsity Sports - Football**Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate football. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2502 Varsity Sports - Volleyball**Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate volleyball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2503 Varsity Sports - Men's Basketball**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is first year athletic participation in intercollegiate basketball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2504 Varsity Sports - Women's Basketball**Credits: 1**

Prerequisite: none

Co-Requisite: none

This is the first season of athletic participation in intercollegiate basketball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2505**Varsity Sports - Baseball****Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate baseball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating

need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2506 Varsity Sports - Softball**Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate softball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2507 Varsity Sports - Golf**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is first year athletic participation in intercollegiate golf. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2511**Varsity Sports - Football II****Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate football for a second season. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2512 Varsity Sports - Volleyball II**Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate volleyball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2513 Varsity Sports - Men's Basketball II**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is the second season of athletic participation in intercollegiate basketball. Students practice daily and compete in the Minnesota College

Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2514 Varsity Sports - Women's Basketball II**Credits: 1**

Prerequisite: none

Co-Requisite: none

This is the second season of athletic participation in intercollegiate basketball. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2515**Varsity Sports - Baseball II****Credits: 1**

Prerequisite: none

Co-Requisite: none

Second season of athletic participation in intercollegiate baseball.

Transfer Curriculum Goal(s): none

PHED 2516**Varsity Sports - Softball II****Credits: 1**

Prerequisite: none

Co-Requisite: none

Athletic participation in intercollegiate baseball for a second season. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

PHED 2517 Varsity Sports - Golf II**Credits: 1**

Prerequisite: none

Co-Requisite: none

This course is the second season of athletic participation in intercollegiate golf. Students practice daily and compete in the Minnesota College Athletic Conference and the National Junior College Athletic Association. Students interested in participating need instructor's approval.

Transfer Curriculum Goal(s): none

Physics

PHYS 1401 College Physics I**Credits: 4**

Prerequisite: MATH 1470

Co-Requisite: none

This course given a general theoretical and practical introduction to PHYSICS. The theory part contains the following topics: kinetics of one and

two dimensions, force and dynamics, circular motion, gravitation, work and energy, linear momentum, rotational motion, bodies in equilibrium, waves, and sound.

Transfer Curriculum Goal(s): 3

PHYS 1402 College Physics II

Credits: 4

Prerequisite: MATH 1470 and PHYS 1401

Co-Requisite: none

This is an algebra-based introductory physics course, and it is a continuation of PHYS 1401. However, it may be taken without having taken College Physics I. The course contains the following topics: fluids, thermodynamics, electromagnetism, AC and DC circuit, electromagnetic waves and light, optics, modern physics including atomic and nuclear physics. The course emphasizes conceptual understanding and problem-solving. The laboratory component is designed to reinforce conceptual understanding with hands-on experiences and physical measurements, and to provide opportunities for scientific report writing. The course uses digital data acquisition and simulations to help students visualize and understand abstract concepts. Knowledge of trigonometry is needed for success in this course.

Transfer Curriculum Goal(s): 3

PHYS 1430 Concepts of Physics: A Universe of Hidden Charm

Credits: 3

Prerequisite: none

Co-Requisite: none

This course introduces concepts in physics through demonstration, description, experimentation, and proportional relation. The topics covered include motion, Newton's Laws of Motion, energy, gravity, waves, sound, properties of matter, heat, electricity, magnetism, and light. Selected topics from relativity, quantum theory, and structure of matter are also covered. The laboratory component provides opportunities for developing basic measurement and analysis skills, and conducting experiments in mechanics, heat, waves, sound, electricity, magnetism, optics, atomic structure, and radiation. The student will develop critical thinking skills, apply scientific methods, and learn communication skills through oral presentation and written reports. Mathematics at high school algebra level is used to unveil models of the known physical world.

Transfer Curriculum Goal(s): 3

Political Science

POLS 1430 Introduction to Political Science

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the basic concepts, philosophies, institutions and processes of government and politics. Topics of study include key concepts and facts, including the significant ideologies that influence modern governments. Study will also include comparative governmental systems with special emphasis placed on political leadership, terrorism, and types of warfare between nations. An examination of citizen participation in politics, political behavior, and political ideologies will also be included.

Transfer Curriculum Goal(s): 5,9

POLS 1435 American Government and Politics

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines the players and institutions of contemporary American government and politics. Topics of study include: American political thought, the U.S. Constitution, federalism, civil liberties and civil rights, public opinion, interest groups, political parties, campaigns and elections, the mass media, Congress, the presidency, bureaucracy, and the judiciary. A special emphasis is placed on the role of citizen participation.

Transfer Curriculum Goal(s): 5,9

POLS 1439

State and Local Government

Credits: 3

Prerequisite: none

Co-Requisite: none

This is a general survey course on state and local government. Topics of study include federalism, state constitutions, political parties, interest groups, elections, state agencies, local government, and policy making. The course covers state legislatures and law-making with special emphasis on the Minnesota Legislature. The office of governor is examined as is the Minnesota State Constitution and state government's relationship to Minnesota's local units of government.

Transfer Curriculum Goal(s): 5,9

POLS 1440 Society and Law

Credits: 3

Prerequisite: none

Co-Requisite: none

This course introduces students to the basic concepts of the law and the le-

gal system in American society. Topics include the history of law, court organization, criminal law and procedure, constitutional law, administrative law, contracts and family law. This course examines how the law reflects society's values, why the law is closely connected to the political system and how the laws are enforced. Specific laws are analyzed and discussed.

Transfer Curriculum Goal(s): 5,9

POLS 2401 Federal Indian Policy

Credits: 3

Prerequisite: none

Co-Requisite: none

Surveys the development of United States Indian Policy. Examines the treaties, laws, and institutions that have been the basis of the trust relationship between the Indian people and the federal government. Course is offered on demand.

Transfer Curriculum Goal(s): 5

POLS 2402 Tribal Government

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will provide an introduction to regional tribal governments by providing a history of their development, an overview of their structures, functions, powers and procedures. The course will compare and contrast these governments to other local, state and federal government, and discuss the varying approaches different tribal government have taken toward tribal business entities and the use of tribal business proceeds.

Transfer Curriculum Goal(s): 5,9

POLS 2450 International Relations

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to the concepts and practice of international relations, especially politics between different nations. Topics of study include globalization; differing national systems, interests and motivations; foreign policy and diplomacy; war and threats to international security; international law and organizations; global economics and technology; and the future of international relations.

Transfer Curriculum Goal(s): 5,8

POLS 2581

Topics in Political Science I

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Political Science. On demand.

Transfer Curriculum Goal(s): none

Practical Nursing

PNUR 1130 Life Span

Credits: 1

Prerequisite: Score of 78 or higher on Accuplacer Reading

Co-Requisite: none

This course covers theories of human development and the progressive stages of physical, emotional, intellectual and social development during the life span.

Transfer Curriculum Goal(s): none

PNUR 1132 Infection Control

Credits: 1

Prerequisite: Score of 78 or higher on Accuplacer Reading

Co-Requisite: none

This course covers scientific concepts related to the causes of infectious diseases, transmission of these diseases and methods of controlling their spread. In addition, the student will study how the human body responds and protects itself from these diseases.

Transfer Curriculum Goal(s): none

PNUR 1134 Pharmacology

Credits: 2

Prerequisite: admission to PN or Medical Assistant program

Co-Requisite: none

This course develops the student's awareness of basic pharmacological concepts. It teaches the Practical Nursing students how to calculate medication dosages and perform conversions between measurement systems. It covers drug laws and standards and safe medication administration. Students learn about the actions of medications in the body, i.e. absorption, biotransformation, metabolism, and excretion. The various classifications of medications are discussed along with how to use medication references.

Transfer Curriculum Goal(s): none

PNUR 1138 Medical Terminology

Credits: 1

Prerequisite: Score of 78 or higher on Accuplacer Reading

Co-Requisite: none

This course teaches students to recognize and build medical terms after learning the meaning of word parts. The course is based on a systems approach. Students will also learn to interpret and use common medical abbreviations.

Transfer Curriculum Goal(s): none

PNUR 1140 Medication Calculations for Health Care Careers

Credits: 1

Prerequisite: Score of 65 or higher on Accuplacer Arithmetic or 52 or higher on Accuplacer Elementary Algebra

Co-Requisite: none

This course is to introduce students to medical dosage calculations and the terminology associated with medication orders. Theory, skill, and terminology related to calculating medication dosages will be the focus of this course. Students will learn how to perform conversions between measurement systems. Students will review basic mathematical concepts related to medication administration.

Transfer Curriculum Goal(s): none

PNUR 1160 Practical Nursing Skills Lab

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers more complex nursing procedures. Concepts and rationales for clean/sterile techniques are explored along with instruction in procedures such as dressing changes, catheterization, suctioning, IV therapy, oxygen therapy, etc. Administration of oral and parenteral medications will also be taught. Documentation of these as well as other types of patient data will be covered, all within the context of the nursing process.

Transfer Curriculum Goal(s): none

PNUR 1161 Clinical Lab I

Credits: 1

Prerequisite: none

Co-Requisite: none

In this beginning clinical laboratory course, the student will take care of selected adult clients at an entry level. This clinical experience will take place in an acute care setting. The student will implement cares and skills that have been learned in prior laboratory and Practical Nursing theory courses. In addition, the student will demonstrate effective communication skills, maintain patient safety, and document cares accurately.

Transfer Curriculum Goal(s): none

PNUR 1162 Clinical Lab II

Credits: 4

Prerequisite: PNUR 1134, PNUR 1161, PNUR 1265

Co-Requisite: none

In this clinical course the student will be expanding upon the knowledge, skills and attitudes necessary to assist individuals experiencing common health care problems that were started in PNUR 1161. The student will demonstrate skill in problem solving through the use of the nursing pro-

cess as they provide care for a variety of clients throughout the life span and in different stages of the health/illness continuum appropriate to the role of the practical nurse. Observational experiences are provided in selected areas to enrich the clinical experience. Student will work full shifts that may include day and/or evening hours.

Transfer Curriculum Goal(s): none

PNUR 1163 Clinical Lab III

Credits: 3

Prerequisite: PNUR 1162, PNUR 1166, PNUR 1175, PNUR 1270

Co-Requisite: none

In this clinical laboratory, additional skills are performed, including IV therapy and professional responsibilities. Students will work full shifts in a clinical setting demonstrating correlation of theory and skills expected of new graduates. Clinical shifts will include day and evening hours.

Transfer Curriculum Goal(s): none

PNUR 1166 Gerontological Nursing

Credits: 2

Prerequisite: Admission to the PN program

Co-Requisite: none

This course covers aging and the aging process. Students will identify physical, psychosocial and health needs of the elderly population. The course emphasizes the role of the nurse in health promotion of older adults, focusing on maximizing potential and minimizing the effects of aging. Some topics covered include; medication interaction with the elderly, elder abuse, community resources and common illnesses of the elderly.

Transfer Curriculum Goal(s): none

PNUR 1168 Psychosocial Nursing

Credits: 3

Prerequisite: Admission to the PN program

Co-Requisite: none

This course presents general principles of communication in the health care setting with an introduction to basic psychosocial information. Numerous mental health issues, substance abuse, and social problems are also studied and discussed. Student role plays help students to understand what mental illness looks like and includes various nursing interventions. This course bridges the gap between general communication and psychosocial problems commonly encountered in the health care setting.

Transfer Curriculum Goal(s): none

PNUR 1175 Maternal Child Health

Credits: 3

Prerequisite: PNUR 1161, PNUR 1134, PNUR 1265

Co-Requisite: none

This course describes signs of pregnancy, prenatal care, labor and delivery, and postpartum care. Complications of pregnancy, labor and delivery and postpartum, as well as fundamental nursing care of the neonate will be presented. The pediatric portion of the course describes the child's experience of hospitalization and health care adaptations for child and family. Care of the child with pediatric disease conditions will be presented. Transfer Curriculum Goal(s): none

PNUR 1265

Medical-Surgical Nursing I

Credits: 5

Prerequisite: admission to the PN program

Co-Requisite: none

In this course a framework for nursing practice is explored. This framework, titled the nursing process, provides a systematic problem-solving method for nurses enabling them to identify and meet patient needs. Complex nursing procedures are discussed within this framework, as well as selected diseases of the various body systems. The role of nutrition in prevention of disease and its application in treatment of disease is included. Transfer Curriculum Goal(s): none

PNUR 1270

Medical-Surgical Nursing II

Credits: 5

Prerequisite: PNUR 1134, PNUR 1161, PNUR 1265

Co-Requisite: none

This course continued on where Medical-Surgical Nursing I finished. In this course selected diseases of the remaining various body systems are discussed within the framework of the nursing process. The role of nutrition in prevention of disease and its application in treatment of disease is included.

Transfer Curriculum Goal(s): none

PNUR 1303 PN Refresher

Credits: 3

Prerequisite: Must be currently licensed or must apply to MN Board of Nursing for relicensure prior to beginning class

Co-Requisite: none

This course is designed to refresh Licensed Practical Nurses who have been inactive or need to re-register their licenses with the Minnesota Board of Nursing. Topics covered in this class are the role of the LPN, the State of Minnesota Nurse Practice Act,

legal and ethical issues, modalities in nursing care delivery systems, nursing process, and update in clinical practice with review of body systems and related skills. Clinical experience will be provided in the acute care setting. Transfer Curriculum Goal(s): none

PNUR 2360 Independent Study

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This student-generated course is an opportunity to study particular areas of interest not covered in the general curriculum.

Transfer Curriculum Goal(s): none

Psychology

PSYC 1411 Personal Growth and Behavior

Credits: 3

Prerequisite: none

Co-Requisite: none

This course focuses on the psychology of adjustment and personal growth. The course stresses application. Students will use the principles of psychology to understand their own life experiences, and learn how to use psychology to change behavior and manage common problems. Topics include positive psychology, stress management, interpersonal relationships, and handling anger.

Transfer Curriculum Goal(s): 5

PSYC 1420

Psychology and Modern Life

Credits: 3

Prerequisite: none

Co-Requisite: none

This course takes an in-depth look at topics in psychology and how they relate to situations and problems of today's society. The course highlights awareness along with the skills to more functionally cope with the psychological aspects of today's rapidly changing and challenging world. Topical areas will include: technology and the person, awareness and tolerance of human differences, psychology of the workplace in a globalized world, group dynamics, relationships, mental illness, bullying, and issues in mental health. Active ways to deal with these contemporary issues within the context of psychology will be integral to the course.

Transfer Curriculum Goal(s): 5,9

PSYC 2421 General Psychology

Credits: 4

Prerequisite: none

Co-Requisite: none

This class presents a general introduction to psychology as a biosocial

science. This survey course will familiarize the student with the basic principles of psychology, show how psychologists employ the scientific method, and equip the beginning student of psychology with a working vocabulary of psychological terminology and critical thinking skills. Areas to be covered include research, the nervous system, learning, personality, memory, psychological disorders and therapy. Transfer Curriculum Goal(s): 2,5

PSYC 2423 Honors General Psychology

Credits: 4

Prerequisite: Admission to the Honors Program

Co-Requisite: none

This honors class presents a general introduction to psychology as a bio-social science. This survey course will familiarize the student with the basic principles of psychology, show how psychologists employ the scientific method, and equip the beginning student of psychology with a working vocabulary of psychological terminology and critical thinking skills. Areas to be covered include research, the nervous system, learning, personality, memory, psychological disorders and therapy. Students will be introduced to psychological research and writing.

Transfer Curriculum Goal(s): 2,5

PSYC 2425 Conflict, Trauma and Post Traumatic Stress Disorder

Credits: 3

Prerequisite: PSYC 2421

Co-Requisite: none

This course will discuss various world conflicts, trauma and job events that may lead to a diagnosis of Post-Traumatic Stress Disorder (PTSD) as well as current research and information regarding traditional and non-traditional prevention and treatment methods for this emotional illness. Individuals can potentially develop PTSD after exposure to a physical or psychological terrifying event or ordeal in which grave physical harm can occur or is threatened or perceived to be threatened. Untreated PTSD can result in social, physical, and emotional dysfunction which affects individuals for an extended period of time resulting in disrupted personal relationships, economic and employment dysfunction, and a significant reliance on society for support.

Transfer Curriculum Goal(s): 5,7

PSYC 2431 Human Development

Credits: 3

Prerequisite: PSYC 2421

Co-Requisite: none

This course is a lifespan approach to understanding human behavior. This course will cover theories and research findings in the field of psychology relevant to the psychological development of individuals across the lifespan. Areas to be covered include physical, cognitive, emotional and social development. The course will examine similarities and differences between individuals in the various stages of the lifespan.

Transfer Curriculum Goal(s): 5

PSYC 2435 Educational Psychology Credits: 3

Prerequisite: PSYC 2421

Co-Requisite: none

This course investigates the psychology of learning as an interdisciplinary blend of psychology and education, exploring and applying both theoretical and practical issues. This course will focus on how theoretical and empirical knowledge about human cognition and learning can be applied to schools and other educational settings by providing students with current relevant research as well as a lens of diversity through which to view topics of study. This course is required in the core sequence for most Bachelor of Science degrees in Education. Transfer Curriculum Goal(s): 5,7

PSYC 2470 Abnormal Psychology Credits: 3

Prerequisite: PSYC 2421 or PSYC 2423

Co-Requisite: none

This course examines psychological disorders, their causes and available treatments. Topics covered include anxiety, mood disorders, substance-related disorders, eating disorders, schizophrenia and disorders of childhood and adolescence. The difference between normal and disordered functioning and relevant social, economic, cultural and historical contexts will also be discussed. Applicable research will be reviewed in terms of cultural diversity implications from both historical and current perspectives. Transfer Curriculum Goal(s): 5,7

PSYC 2570 Topics in Psychology Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics in psychology.

Transfer Curriculum Goal(s): none

Reading

READ 0591 Reading I Credits: 5

Prerequisite: Accuplacer reading comprehension score of 32-55

Co-Requisite: none

This course is designed for students who wish to improve their basic reading skills. Coursework includes developing a set of strategies for reading and responding to different types of college textbooks reading with an emphasis on general comprehension of written material, vocabulary development, and effective reading & study techniques. A combination of individual and group work will use both printed materials and computers. Transfer Curriculum Goal(s): none

READ 1401 College Reading Credits: 3

Prerequisite: READ 1500

Co-Requisite: none

This course is designed to help students understand fundamental academic reading strategies. Students will analyze and interpret what they read through discussion, writing and reading. Additionally, students will have the opportunity to: identify and use a wide variety of strategies for reading your college assignments, develop a repertoire of discipline-specific reading skills, know what to do when they don't understand something you read, apply appropriate strategies when you encounter new or technical words, participate effectively in a community of academic readers, summarize and evaluate critically the ideas presented in textbooks.

Transfer Curriculum Goal(s): 2

READ 1500 Reading II Credits: 3

Prerequisite: Accuplacer reading comprehension score of 56-77, or successful completion of READ 0591

Co-Requisite: none

This course emphasizes critical reading strategies and college level vocabulary. It presents college reading as information processing and focuses on strategies for improving comprehension, selection, organization, and recall. Reading materials represent a variety of academic disciplines and occupational areas. Course material will focus on textbooks and other types of reading materials prevalent in college. A combination of individual and group work will use both printed material and computers.

Transfer Curriculum Goal(s): none

READ 1598 Topics in Reading Credits: 1-4

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Reading. Offered on demand.

Transfer Curriculum Goal(s): none

Renewable and Sustainable Energy Technology

RNET 1100 Introduction to Renewable and Sustainable Energy Credits: 3

Prerequisite: None

Co-Requisite: none

Intro to Renewable and Sustainable Energy is an overview course on energy technologies and sustainability. Renewable energy technologies include: solar, wind, geothermal and alternative fuels. Sustainable practices include energy/efficiency, building performance, energy audits and energy management.

Transfer Curriculum Goal(s): none

RNET 1115 Introduction to Green and Retro Construction Credits: 3

Prerequisite: None

Co-Requisite: none

Intro to Green/Retro Construction is an overview course in applying green-building principles to new and existing buildings. Topics include energy conservation, building performance analysis and implementation of green building best practices.

Transfer Curriculum Goal(s): none

RNET 1190 Topics in Renewable and Sustainable Energy Credits: 1-3

Prerequisite: None

Co-Requisite: none

This course will examine selected topics of interest in Renewable and Sustainable Energy Technology. Offered on demand.

Transfer Curriculum Goal(s): none

RNET 1195 Internship Credits: 1-9

Prerequisite: None

Co-Requisite: none

Transfer Curriculum Goal(s): none

Robotics

RAST 1101 Industrial Electronics I Credits: 3

Prerequisite: none

Co-Requisite: RAST 1111

This course covers resistance, capacitance, and inductance and their relationships with DC and AC voltages. The course begins with DC theory and covers Ohm's law, series circuits, Kirchhoff's law, series-parallel Circuits and networks. AC generation, RC/RL circuits, rectification and the use of test equipment will also be addressed. Active devices such as diodes will be

covered on an introductory level.
Transfer Curriculum Goal(s): none

RAST 1102 Industrial Electronics II

Credits: 3

Prerequisite: RAST 1101

Co-Requisite: RAST 1212

This course continues where Industrial Electronics I left off by covering resistive, inductive, and capacitive circuits. This course also includes digital electronics by covering numbering systems, logic gates, Boolean Algebra, sequential logic circuits, encoders, decoders, and digital to analog converters.

Transfer Curriculum Goal(s): none

RAST 1103 Motors and Drives

Credits: 3

Prerequisite: RAST 1101

Co-Requisite: RAST 1113, RAST 1206

This course covers electrical safety, commonly used industrial electrical symbols, and industrial electrical design using wiring and line (ladder) diagrams. The course also covers industrial equipment such as: push buttons, relays, contactors, motor starters, and variable frequency drives. Preventive maintenance and troubleshooting techniques will also be covered.

Transfer Curriculum Goal(s): none

RAST 1104 Introduction to Robotics

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers introduction to start-up, operation and simple programming of industry standard robots in the Robot Lab. Items covered are robot safety, robot types, robot move types, program structure, motion control, decision making, peripheral control, robot control modes, and program examples.

Transfer Curriculum Goal(s): none

RAST 1105 Blueprint Reading

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers the skills necessary to interpret drawings and make technical sketches. Projection systems, drawing symbols, working drawings, assembly drawings, piping drawings, schematics, block diagrams, cable drawings, wire lists and multi page drawings are studied as they relate to robotics and automation.

Transfer Curriculum Goal(s): none

RAST 1109 Computers in Industry

Credits: 2

Prerequisite: none

Co-Requisite: none

This course covers an introduction

hardware and software components of personal computers. Items covered include the development of computers, working with multiple Microsoft operating systems, the use of Microsoft Office products, networking, data transmission, basic replacement of hardware, software installation, and working with peripherals such as floppy/hard/CD drives.

Transfer Curriculum Goal(s): none

RAST 1110

Introduction to Manufacturing

Credits: 2

Prerequisite: none

Co-Requisite: none

This course provides a basic overview of basic manufacturing processes and career opportunities within manufacturing. Students will participate in a manufacturing simulation in which they will analyze the manufacturing process for a product and redesign the process to incorporate a teaming approach. Students will be given an introduction to the critical nature of safety in manufacturing and to the role of the individual in maintaining a safe work environment. This course provides students with an opportunity to develop their interpersonal skills through interactive exercises conducted in a team setting. Debriefing these exercises with all members of the class helps ensure that the exercises translate into personal and interpersonal learning for the participants.

Transfer Curriculum Goal(s): none

RAST 1111 Industrial Electronics

Lab I

Credits: 2

Prerequisite: none

Co-Requisite: RAST 1101

This course covers hands-on skills in basic electronics. A proto-board is used in conjunction with several pieces of test equipment to build and measure circuit parameters. The laboratory exercises reinforce the related concepts covered in the companion theory course. The laboratory procedure teaches the student basic test and measurement techniques.

Transfer Curriculum Goal(s): none

RAST 1113 Motors and Drives Lab

Credits: 3

Prerequisite: RAST 1111

Co-Requisite: RAST 1103, RAST 1206

This course uses electrical safety procedures, electrical drawings, and commonly used symbols for hands on learning. The use of contactors, motor starters, relays, motors, limit switches, solenoids, and indicators will enhance the hands on learning experience and wiring of various circuits. Trouble-

shooting and repairing techniques will also be covered.

Transfer Curriculum Goal(s): none

RAST 1114 Math for Industrial Technology

Credits: 3

Prerequisite: none

Co-Requisite: none

This course covers topics such as calculator usage, SI unit conversions, algebraic applications of Ohm's & Power Laws, trigonometric functions, & dimensional analysis.

Transfer Curriculum Goal(s): none

RAST 1206 Programmable Logic Controllers I

Credits: 3

Prerequisite: RAST 1101, RAST 1109

Co-Requisite: RAST 1103, RAST 1113

This course covers the basic concepts of operation common to PLCs. Content will include basic uses of PLC operation, wiring input and output devices, sequencing, timing systems, countering systems, math functions, and programming techniques. This course introduces the Ladder Logic programming environment. Troubleshooting programs along with wiring will be practiced in the lab.

Transfer Curriculum Goal(s): none

RAST 1212 Industrial Electronics Lab II

Credits: 2

Prerequisite: RAST 1111

Co-Requisite: RAST 1102

This course continues where "Industrial Electronics Lab I" left off by teaching hands-on skills in measuring and calculating resistive, inductive, and capacitive circuit parameters. This course also includes digital electronics by constructing circuits that demonstrate numbering systems, logic gates, Boolean Algebra, sequential logic circuits, encoders, decoders, and digital to analog converters.

Transfer Curriculum Goal(s): none

RAST 2101 Application Planning and Layout

Credits: 2

Prerequisite: RAST 1102, RAST 1212

Co-Requisite: none

This course covers the specifics of how a robotic application / automated manufacturing cell is designed. Included in the course are robotic placement within cell, types of robot(s) used within the cell, safety devices, electrical interfacing of controls, programming flow charting, developing timelines, fixture design, robot tooling design.

Transfer Curriculum Goal(s): none

RAST 2105 Transducers

Credits: 2

Prerequisite: RAST 1101, RAST 1104, RAST 1111

Co-Requisite: none

This course covers basic sensing terminology, both contact and non-contact sensing devices will be covered in both lecture and lab activities. These include inductive, photo, capacitive, analog, and machine vision. Students will during the lab portion of the class wire and measure sensor parameters using manufacturers data sheets, and sensor software. Included in the labs students will integrate the sensors as they would be used in common automated manufacturing systems. This includes integrating the devices into robot and plc I/O, programming plc, sensors and robots that give learners a practical understanding of how different sensors are used in the automated manufacturing environment. Transfer Curriculum Goal(s): none

RAST 2106 Industrial Electronics III

Credits: 2

Prerequisite: RAST 1102

Co-Requisite: RAST 2116

This course covers bipolar transistors, voltage/current BJT operation, BJT characteristics, basic uses of BJT, BJT amplifier circuits. FET's, MOS FET's, power FET's, operational amplifiers, optoelectronics, robot I/O types, I/O setups, and configurations. Transfer Curriculum Goal(s): none

RAST 2116 Industrial Electronics Lab III

Credits: 2

Prerequisite: RAST 1212

Co-Requisite: RAST 2106

This course requires that the student construct, connect, measure, and document parameters and operation of content covered and discussed in RAST 2106, such as bipolar junction transistors and amplifiers, field-effect transistors, op-amps, opto-electrical devices, and robot I/O. Transfer Curriculum Goal(s): none

RAST 2150 Introduction to Robot Operations

Credits: 2

Prerequisite: none

Co-Requisite: none

This is an introductory course which will focus lecture and lab activities on operation of a robot within an existing automated manufacturing cell. Students will learn correct power up procedures for robot controllers, e-stop recovery, motion types, tooling control, teaching positional data, conditional program control, I/O types, references and addresses as they

relate to robots and integrated automated machine processes.

Transfer Curriculum Goal(s): none

RAST 2151 Applied Robotics Lab I

Credits: 6

Prerequisite: RAST 2101

Co-Requisite: none

The applied robotics lab course begins the process of student working within application groups implementing the robotic automated manufacturing application designed and developed in RAST 2101 Application Planning and Layout. This will include building electrical control center, building robot end of arm tooling, product fixturing, programming of all programmable devices within the cell which can include multiple robots, programmable logic controllers, sensors and other devices. During the course students will document cell progress, evaluate operation of electrical, mechanical and programmed devices. Applications can be welding, material handling, assembly, CNC machine load unload, and replicate actual automated manufacturing processes in industry. Transfer Curriculum Goal(s): none

RAST 2153 Applied Robotics II

Credits: 6

Prerequisite: RAST 2151, RAST 2101

Co-Requisite: none

This course will continue to expand the robotic applications and integration of robot controllers, programmable logic controllers along with advanced programming features and function specific to the student designed and built application started in RAST 2151. Students will use the application during the semester to demonstrate functionality of application to potential employers, fellow students and staff.

Transfer Curriculum Goal(s): none

RAST 2154 Robot Controller Maintenance

Credits: 2

Prerequisite: RAST 1102, RAST 1212

Co-Requisite: none

This course covers normal maintenance and trouble shooting of robot controller components. Included are lab exercises in trouble shooting real and simulated faults within the controller using electrical and software trouble shooting procedures outlined within the manufacturers' manuals. Safe trouble shooting procedures will be discussed in lecture and practiced in the lab.

Transfer Curriculum Goal(s): none

RAST 2165 Fluid Power

Credits: 2

Prerequisite: PHYS 1401

Co-Requisite: none

This course covers fluid power and pneumatic symbols, basic circuits, properties of both fluid and compressed air. Storage, connections, valves, fitting, pressure area volume will be examined and explained. Actuating devices and controlling devices used in common automated systems will be covered.

Transfer Curriculum Goal(s): none

RAST 2355 Programmable Logic

Controllers II

Credits: 2

Prerequisite: none

Co-Requisite: none

This course expands on the use of plc's covered in RAST 1106. Included in the course is integration of the plc hardware and programs to control complex robot applications. Included in the course are the use of advanced program functions within the plc software structure, examples include masked memory moves, sub routines, sequencers, math function, data types, data move commands, hardware / software communication parameters, external programming devices. Trouble shooting of both plc hardware, software and program logic will be covered.

Transfer Curriculum Goal(s): none

RAST 2390 Robotics Internship

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

Internship is an elective opportunity to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.

Transfer Curriculum Goal(s): none

RAST 2395 Advanced Robot

Controller

Programming

Credits: 2

Prerequisite: RAST 1102, RAST 1212

Co-Requisite: none

This course covers the advanced move types while teaching robot point data, system files, tool offsets, I/O mapping, file manipulation that a technician would be required to understand and program a complete robotic application such as welding, painting or assembly.

Transfer Curriculum Goal(s): none

RAST 2399 Independent Study

Credits: 1-5

Prerequisite: instructor's consent

Co-Requisite: none

This student-generated course is an opportunity to study particular areas

of interest not covered in the general curriculum.

Transfer Curriculum Goal(s): none

Secretarial - Medical

SECM 1140 Healthcare Delivery Systems

Credits: 3

Prerequisite: none

Co-Requisite: none

This course describes the organization, financing, regulatory and delivery of the different healthcare services including the continuum of care concept. Items that will be studied include the healthcare delivery systems development, organization, performance, accreditation standards, and licensing/regulatory agencies. The course will study the historical organization, present and future of the U.S. Health System.

Transfer Curriculum Goal(s): none

SECM 1142 Healthcare Information Systems

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will study the use of electronic health records, data exchanges, and the commonly available software tools used in healthcare by major vendors including the use of encoding tools. The course will provide students with an understanding of the electronic health record process, the role of health information technology, meaningful use, computer assisted coding, health information data analysis, and health information exchange.

Transfer Curriculum Goal(s): none

SECM 1144 Medical Secretary Pharmacotherapy

Credits: 2

Prerequisite: SECM 1160, SECM 1360

Co-Requisite: none

This course will provide basic and practical understanding of the actions of drugs, including absorption, distribution, metabolism and excretion of drugs by the body. The course will cover drug classifications, such as their purpose, side effects, cautions and interactions.

Transfer Curriculum Goal(s): none

SECM 1146 Fundamentals of Coding and Reimbursement

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will cover the coding and billing regulations affecting the health insurance industry. This course will

give an overview of ICD-9-CM, ICD-10-CM, ICD-10-PCS, CPT and HCPCS coding. The students will apply coding skills to claim creation using processes established by the health insurance industry and coding guidelines/requirements. This course does not fulfill requirements within the Medical Administrative Secretary diploma or Coding emphasis AAS degrees.

Transfer Curriculum Goal(s): none

SECM 1150 Intro to Diagnosis and Procedure Coding

Credits: 3

Prerequisite: SECM 1160, SECM 1360

Co-Requisite: none

International Classification of Diseases ICD-9-CM and ICD-10-CM. Use of official coding guidelines and reporting requirements. DX code systems or code sets including DSM-IV. ICD-9CM Volume III. Current procedural terminology - CPT 4, HCPCS Level II codes and other procedure coding systems.

Transfer Curriculum Goal(s): none

SECM 1160 Medical Secretary Anatomy/Physiology I

Credits: 3

Prerequisite: none

Co-Requisite: SECM 1360

This course will study the structure and function of the human body utilizing a system approach. The course will emphasize the gross and microscopic anatomy, as well as the physiology of the cell, skeletal system, muscular system, nervous system, cardiovascular, respiratory, urinary, reproductive, endocrine, and digestive systems. The course will cover disease process affecting the human body via an integrated approach to specific disease entities, including the study of causes, diagnosis and treatment of disease.

Transfer Curriculum Goal(s): none

SECM 1161 Medical Secretary Anatomy/Physiology II

Credits: 3

Prerequisite: SECM 1160

Co-Requisite: none

This course continues the study of the structure and function of the human body utilizing a system approach. The course will focus on the gross and microscopic anatomy as well as the physiology of the cell, skeletal system, muscular system, nervous system, cardiovascular, respiratory, urinary, reproductive, endocrine, and digestive systems. The course will also place special emphasis on the disease process affecting the human body via an integrated approach to specific disease entities, including the study of causes, diagnosis and treatment of

disease.

Transfer Curriculum Goal(s): none

SECM 1163 Medical Office Procedures

Credits: 3

Prerequisite: none

Co-Requisite: none

This introductory course covers medical office careers, medical law and ethics, medical appointments, telephone techniques, travel arrangements, meeting arrangements, business and patient correspondence, patient accounts billing, and an introduction to medical practice finance. This course will use both manual and computer procedures and processes.

Transfer Curriculum Goal(s): none

SECM 1165 Medical Records Management

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is an introduction to procedures for managing medical records. The emphasis of this course is patient record formats and the contents of an inpatient, outpatient and physician office medical record. This course also includes manual and electronic storage and retrieval; with attention to HIPAA laws and legislation, recover audit contractor programs (RAC) and release of protected health information.

Transfer Curriculum Goal(s): none

SECM 1166 Medical Machine Transcription I

Credits: 3

Prerequisite: none

Co-Requisite: SECM 1360

This course is an introduction course that will prepare the medical secretary/medical administrative for transcription in the medical setting. The emphasis will be on equipment techniques and basic transcribing skills and familiarization with different formats of reports and letters. Emphasis is placed on production, medical grammar, speed, accuracy, proofreading, spelling, and correcting errors as it relates to the medical setting.

Transfer Curriculum Goal(s): none

SECM 1300 Intro to Keyboarding

Credits: 1

Prerequisite: none

Co-Requisite: none

This course is designed for the student who has never had keyboarding or for the student who wants to improve their keyboarding skills. The major objectives are to develop touch control of the keyboard and proper

typing techniques, and to build basic speed and accuracy. This class is learning the keyboard only. It will not cover letter styles or reports.
Transfer Curriculum Goal(s): none

SECM 1302 Championship Key-boarding

Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to help students develop superior keyboarding skills by improving accuracy and speed. Emphasis is placed on accuracy first, speed second. The student will learn how to evaluate his/her typing errors and determine the corrective practice needed to improve accuracy and speed.
Transfer Curriculum Goal(s): none

SECM 1360 Medical Terminology

Credits: 3

Prerequisite: none
Co-Requisite: none

This course will introduce the building of medical words including prefixes, suffixes, combining forms from Greek and Latin word parts, and the rules for connecting them to form medical terms. Definition and spelling of word roots, prefixes, and suffixes is emphasized. Emphasis is placed on spelling and defining medical words. A foundation is created for the continued development of medical vocabulary. Medical abbreviations are also presented for each medical specialty. This course is geared to anyone who wishes to acquire or review medical terminology in a variety of professions including lawyer's offices, insurance companies, hospital and clinic, chiropractic offices, eye doctors, nursing homes, home health care, specialty clinics and pharmacies.
Transfer Curriculum Goal(s): none

SECM 2140 Intermediate Diagnosis Coding

Credits: 4

Prerequisite: SECM 1144, SECM 1150
Co-Requisite: none

The focus of this class is reviewing the coding rules for the ICD-9-CM, ICD-10-CM diagnosis coding systems and then applying the rules. This will be authentic coding, using and creating coding scenarios. Comparison will be shown contrasting the ICD-9-CM & ICD-10-CM code assignments and conventions. Case studies will be used with more complex code assignments.
Transfer Curriculum Goal(s): none

SECM 2142 Intermediate Procedure Coding

Credits: 4

Prerequisite: SECM 1144, SECM 1150
Co-Requisite: none

The focus of this class is learning the coding rules for the CPT, ICD-9-CM and ICD-10-PCS procedure coding systems and then applying the rules to code patient services. This will be authentic coding. We look at case studies and more complex code assignments using CPT. Comparison will be shown contrasting the ICD-9-CM & ICD-10-PCS procedure coding systems at an introductory level. Will also focus on creating and coding scenarios using ICD-9-CM, ICD-10-PCS and CPT procedure codes.
Transfer Curriculum Goal(s): none

SECM 2160 Medical Transcription II

Credits: 3

Prerequisite: SECM 1166, SECM 1360
Co-Requisite: none

This course will prepare the medical secretary/administrative secretary for transcription in the medical setting. The emphasis will be on equipment techniques and transcribing skills and familiarization with different formats of reports found in a medical clinic. These reports include letters, chart notes, x-ray reports, and procedure notes. Emphasis is placed on production, medical grammar, speed and accuracy, proofreading, spelling, and correcting errors.
Transfer Curriculum Goal(s): none

SECM 2162 Medical Transcription III

Credits: 3

Prerequisite: SECM 2160
Co-Requisite: none

In this course the student completes the recordings in specialty areas as well as ancillary departments in a hospital and clinic setting. Emphasis is placed on production, grammar, punctuation, speed, accuracy, proofreading, spelling, and correcting errors.
Transfer Curriculum Goal(s): none

SECM 2172

Reimbursement Methodologies

Credits: 2

Prerequisite: SECM 1163
Co-Requisite: none

This course is the study of coded data and health information reimbursement and payment systems appropriate to all healthcare settings and managed care. The course includes contemporary prospective payment systems and key health plans, charge master maintenance, and evaluation of fraudulent billing.
Transfer Curriculum Goal(s): none

SECM 2190 Internship (Professional Practicum)

Credits: 3

Prerequisite: instructor approval
Co-Requisite: none

Professional practicum is an opportunity for students to earn college credit while experiencing hands on the day to day tasks as it relates to their area of emphasis in the program. It will challenge your knowledge and skills to prepare you for industry and certification exams.

Transfer Curriculum Goal(s): none

SECM 2313 Medical Secretary Independent Study

Credits: 1-3

Prerequisite: instructor's consent
Co-Requisite: none

The intent of this course is to allow flexibility in providing learning experiences to meet unique student needs. Students will meet with the instructor to set up their own course of study with the instructor's approval.
Transfer Curriculum Goal(s): none

SECM 2390 Medical Secretary Internship

Credits: 2-3

Prerequisite: instructor's consent
Co-Requisite: none

Internship is an opportunity for students to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.
Transfer Curriculum Goal(s): none

Sociology

SOCL 1401 Introduction to Sociology

Credits: 3

Prerequisite: none
Co-Requisite: none

This foundation course is highly recommended as the starting point from which students may logically proceed to higher level sociology classes. Students will be introduced to the fundamental concepts of the sociological perspective, including culture, socialization, organization, authority, deviance and inequality.
Transfer Curriculum Goal(s): 5

SOCL 1403 Honors Introduction to Sociology

Credits: 3

Prerequisite: Admission to the Honors Program
Co-Requisite: none

This foundation Honors course is highly recommended as the starting point from which students may logically proceed to further study of sociology. Students will be introduced to the

fundamental concepts of the sociological perspective, including culture, socialization, organization, authority, deviance and inequality. Students in the honors course will be required to write papers reflecting a substantial understanding of the principle concepts of the sociological perspective. Transfer Curriculum Goal(s): 5,8

SOCL 1472 Sociology of the Family

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines contemporary issues facing families in the United States. Students will examine key topics in the sociology of families such as marriage, cohabitation, divorce, teen pregnancy and family violence. Attention will also be given to the variations in families by race, class, gender, and sexual orientation. Throughout the course, students will refine their "sociological imaginations" in relation to family life. How are families shaped by their social environments? Why are families changing? Are the changes as dramatic as some social commentators claim? Is "the family" indeed breaking down?

Transfer Curriculum Goal(s): 5

SOCL 2405 Criminology

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will study the nature and origins of crime, past and present theories of crime, the social construction of criminality, the social costs of incarceration, and cross-cultural strategies for addressing crime issues and decriminalization of consensual crimes.

Transfer Curriculum Goal(s): 5

SOCL 2411 Social Problems

Credits: 3

Prerequisite: none

Co-Requisite: none

In this course students will examine current social problems from a sociological perspective. Students will focus on how social problems come to be defined, the ramifications of these problems, and possible solutions. Who is poor and why? Why do some people engage in criminal activities while others do not? Is the "War on Drugs" working? The answers to these and other questions will be explored.

Transfer Curriculum Goal(s): 5,9

SOCL 2422 Culture and Environment

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will examine environmental

issues from a sociological perspective. The focus will be on social, political, and economic factors which encourage or discourage protection of the natural life support systems of earth. What steps are going to be required to restore our damaged resources and create a sustainable society for future generations? Considering the implications of what we have studied, students will be encouraged to develop a personal philosophy.

Transfer Curriculum Goal(s): 5,10

SOCL 2480 Sociology of Death and Dying

Credits: 3

Prerequisite: none

Co-Requisite: none

This course examines death, dying and bereavement from a variety of perspectives (e.g., historical, cross-cultural and social-psychological), but it emphasizes a sociological perspective on death and dying. Among the topics covered are: the social meaning of death, America as a "death-denying" culture, the dying process, life after death, euthanasia, suicide, hospice care, funerals and body disposition, the American Healthcare system, diversity in death rituals, and the grieving process.

Transfer Curriculum Goal(s): 5

SOCL 2481 Race, Ethnicity and Oppression

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will investigate the historical factors and events that explain oppressive acts and ideas in the present. Positive contributions of oppressed groups to modern culture and everyday life will be noted. Students will debate solutions to issues which have proven to be very controversial.

Transfer Curriculum Goal(s): 5,7

SOCL 2599 Topics in Sociology

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Sociology. Offered on demand.

Transfer Curriculum Goal(s): none

Spanish

SPAN 1401 Beginning Spanish I

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is an entry level language class. Beginning level vocabulary groupings (pastimes, family, time, clothing, foods) will be used in ele-

mentary conversations. Grammar will include present tense of regular verbs, stem-changers, present progressive, irregulars, reflexives and some idiomatic constructs. Preterite tense of regular verbs will be introduced, time permitting. Graded level readings are used for comprehension and paired activities and role-play are implemented for beginning conversational interaction. Cultural data and correct intercultural communication is introduced by country.

Transfer Curriculum Goal(s): 8

SPAN 1402 Beginning Spanish II

Credits: 4

Prerequisite: SPAN 1401 or equivalent

Co-Requisite: none

This course is a continuation of SPAN 1401. Basic vocabulary groupings will be added (town, travel, social issues, as per text) at a more diverse topic level. Short readings related to Spanish-speaking countries are introduced for pronunciation and comprehension exercises. Grammar and vocabulary is practiced through writing and oral class participation. Advanced grammar includes: preterit, conditional, imperative (commands), present tense subjunctive. Cultural activities are an integral piece of each lesson. (SPAN 1401, 1 year of high school Spanish or equivalent recommended.)

Transfer Curriculum Goal(s): 8

SPAN 1597 Topics in Spanish

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine a specialized selected topic related to Spanish language and / or Spanish language cultures. On demand.

Transfer Curriculum Goal(s): none

SPAN 1598 Topics in Spanish

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine a specialized selected topic related to Spanish language and / or Spanish language cultures. On demand.

Transfer Curriculum Goal(s): none

SPAN 2401 Intermediate Spanish I

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is a review of the fundamentals in grammar and vocabulary covered in the first year (or years) of Spanish language study, with amplification to more advanced structures and complex language usage. The remaining verb tenses (future, con-

ditional, subjunctives) will be introduced through reading, writing and speaking. Graded level readers are used for pronunciation, comprehension and cultural information, providing topics in art, music, politics and current events. Short essays and conversations complete the language skill practices. SPAN 1402 or equivalent (2-3 years of high school Spanish) recommended.

Transfer Curriculum Goal(s): 8

SPAN 2402 Intermediate Spanish II **Credits: 2**

Prerequisite: none

Co-Requisite: none

This course follows SPAN 2401 in sequence of grammar acquisition. Emphasis is given on practice and review of all the verb tenses, in combination with the vocabulary acquired at this level. Special concentration on the advanced forms of perfect, conditional, subjunctives and clauses will be studied. Vocabulary and language structures will reflect upper level constructs. SPAN 2401 or equivalent recommended. Check with instructor.

Transfer Curriculum Goal(s): 8

SPAN 2403 Intermediate Spanish: Reading, Writing, Speaking **Credits: 2**

Prerequisite: none

Co-Requisite: none

This course is the compliment/ completion of SPAN 2402. It is designed to promote communication in the target language. Graded - level readers provide reading practice, grammar review, vocabulary building and cultural reference. Role play, videos, newspapers, magazines and native speaker guests serve as a basis for class discussion, enhance reading, listening and comprehension skills. SPAN 2402 or equivalent recommended. Check with instructor.

Transfer Curriculum Goal(s): 8

SPAN 2420 Many Faces of Mexico **Credits: 3**

Prerequisite: none

Co-Requisite: none

This interdisciplinary course explores the cultural, historical and social realities which together form contemporary Mexico. By studying the roots (Aztec, Toltec, Olmec) through the Spanish colonization (Cortés - Santa Anna), U.S. / Mexican relations (The Alamo to THE WALL), we arrive at the present with a better understanding of today's economical, political and sociological interrelationship. What future will we forge between these two neighbors?

Transfer Curriculum Goal(s): 6,8

Speech

SPCH 1410 Introduction to Communication Studies **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is designed to introduce students to speech communication as it relates to three core areas: interpersonal communication, small group communication and public speaking. Through this introductory course, students will explore the fundamental theories of communication as well as identify and apply the basic skills from each of those three core areas.

Transfer Curriculum Goal(s): 1

SPCH 1421 Interpersonal Communication **Credits: 3**

Prerequisite: none

Co-Requisite: none

This is an introduction to the techniques of communication inherent in improving one-on-one skills, including: verbal and non-verbal communication, perception, self-disclosure, listening and feedback, sharing emotions, assertiveness, coping with conflict, and communicating with family, friends and in the workplace.

Transfer Curriculum Goal(s): 1

SPCH 1431 Fundamentals of Public Speaking **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is designed to introduce students to the basic principles of effective public speaking, focusing on informative and persuasive techniques. Topics included are topic selection and development, message and argument construction, audience and occasion analysis, critical thinking and evaluation, outlining and structure, and delivery and presentation skills.

Transfer Curriculum Goal(s): 1

SPCH 1450 Introduction to Mass Communication **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is an introduction to the major areas of mass communication: Books, newspapers, magazines, radio, television, film, and the Internet. Students will study and critically assess the technical, historical, social, economic, and ethical aspects of each medium.

Transfer Curriculum Goal(s): 2,9

SPCH 1451 Argumentation and Debate **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will introduce students to the principles of effective and ethical debate on issues of public policy. Students will analyze an issue, conduct research and construct arguments in support of a particular position on the issue, present those arguments in a structured debate format, and critique the work of fellow students.

Transfer Curriculum Goal(s): 2

SPCH 1464 Creative Communication **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course will introduce students to the principles of creative communication. Students will research the theoretical approaches to creativity, link its relevance to the communication process, and refine their creative problem solving skills in both individual and group contexts.

Transfer Curriculum Goal(s): 1

SPCH 1470 Blogging and Vlogging **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is designed to introduce students to the communication media of blogging and vlogging. Students will explore and critique different types of blog formats. Utilizing free technology tools, students will learn the steps of creating a blog and then apply what they've learned with the creation of their own site. Part of this process includes an evaluation of criteria for blog purpose, appropriateness, style and effectiveness.

Transfer Curriculum Goal(s): 1,2

SPCH 1472 Online Social Networking **Credits: 3**

Prerequisite: none

Co-Requisite: none

This course is designed to introduce students to examples of current online social networking platforms. Students will explore different mediums and will evaluate communication choices for purpose, appropriateness, and effectiveness of message development and network platform. Students will be expected to register for accounts and participate in selected networks. It is recommended that students should have basic computer proficiency skills.

Transfer Curriculum Goal(s): 1

SPCH 2421 Intercultural Communication

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed to explore, identify and understand obstacles and opportunities influencing communication between persons from different cultures, their patterns of communication and interaction. Topics will include communication and culture; cultural variables affecting communication such as language, nonverbal behaviors, perception, rules, values, and attitudes.

Transfer Curriculum Goal(s): 1,7

SPCH 2431 Small Group Communication

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed so students can learn the basic principles and dynamics of group participation by analyzing and practicing the processes that improve a group's functioning. Some areas that students will explore include interpersonal group relationships, social roles/norms/values, problem-solving decision-making, leadership skills, conflict management and intervention and change strategies.

Transfer Curriculum Goal(s): 1

SPCH 2570 Topics in Speech

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Speech. Offered on demand.

Transfer Curriculum Goal(s): none

SPCH 2590 Serving Learning

Credits: 1-3

Prerequisite: none

Co-Requisite: none

Students in this course develop and/or implement service learning project to help the college's community including the surrounding local community under the supervision of college faculty and in cooperation with the staff of community organizations and agencies. Projects may include collaboration with college classes, various community agencies and organizations, education projects for college students, mentoring and shadowing. Students gain hands-on experience in project planning, development, implementation and evaluation.

Transfer Curriculum Goal(s): none

Sustainability Studies

SUST 1400 Introduction to Sustainability

Credits: 3

Prerequisite: none

Co-Requisite: none

In the past few years, sustainability concerns have come to the forefront. In order for humans to continue, and pass on to future generations a planet that provides for the needs of all, we must change the way we do things. This course will look at what sustainability is, what it is not, and what it needs to be.

Transfer Curriculum Goal(s): 8

SUST 2160 Sustainability Case Studies

Credits: 2

Prerequisite: none

Co-Requisite: none

This is a capstone course for a certificate in Sustainability. It can also be used by any student who, after completing the Introduction to Sustainability course, wants to determine if they can provide possible solutions for real world issues regarding sustainability and the future of all life on our planet.

Transfer Curriculum Goal(s): none

Theatre

THTR 1430 You Tube is a Stage—Lights, Curtain, Action

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will use online technology to successfully locate videos that show elements of theatre production and performance. Students will learn to discern strong theatrical elements and articulate the reason viewers have made example videos most popular and virally viewed. Students will produce videos showing theatrical elements and techniques, demonstrating their understanding. High speed internet connection and access to a web cam with microphone and 1.3 mega pixel or higher capability.

Transfer Curriculum Goal(s): 6

THTR 1432 Digital Storytelling: Stories of You and Yours

Credits: 3

Prerequisite: none

Co-Requisite: none

Students will learn elements of Theatre and personal storytelling by researching family and regional stories for development. They will write the script of the story they wish to create

and use video and/or still photography and their voice-overs to transfer their stories from the written page to performance – personal digital stories. Growth of the stories from fledgling concept through the writing process (only 3-5 minutes length maximum) layering on such elements as perspective, urgency, foreshadowing, and climax will progress through the semester.

Transfer Curriculum Goal(s): 1,6

THTR 1441 Oral Interpretation of Literature

Credits: 3

Prerequisite: none

Co-Requisite: none

Oral interpretation of literature is the presentation of a literary script by oral readers using their voices & bodies to suggest the intellectual, emotional & sensory experiences inherent in the literature. This is a performance course aimed at developing individualized expression in the reading of poetry, prose and drama. Unlike theatre, the script is read and not memorized.

Transfer Curriculum Goal(s): 1

THTR 1442 Improvisation

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will introduce students to the performance art of improvisation. Through an application of basic improvisation principles and the use of theatre games, students will acquire a basic skill level in spontaneously generating character, situation, dialogue, and story. Students will showcase their work in live performance situations with invited audiences.

Transfer Curriculum Goal(s): 6

THTR 1443 Stage to Screen: Plays that Become Movies

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will study selected plays and the film versions of those plays. It will focus on a comparative analysis of how the ideas of a script are communicated via the stage versus how those ideas are communicated via the film medium. Students will read plays, view the film versions of those plays, and participate in in-class discussion and submit analytical papers.

Transfer Curriculum Goal(s): 6

THTR 1451 Introduction to Theatre

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of the various

elements that make up the theatre experience, including a brief overview of the history of theatre development, and an examination of theatre traditions in non-Western cultures: including lecture, readings, and attendance of live performances.

Transfer Curriculum Goal(s): 6,8

THTR 1452 Stage Make-up

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a study of materials and techniques used in the application of theatrical make-up. The class also covers script analysis, research, make-up design and practical applications. Students allergic to latex or wool should not take this class.

Transfer Curriculum Goal(s): 6

THTR 1453 Theatre Costuming

Credits: 3

Prerequisite: none

Co-Requisite: none

This one credit class is for participating in any of the following technical area of the theatre: i.e. set construction, painting, lighting, sound, make-up, costuming, properties, front of house and stage crew. This course requires 30 hours of work over the course of the semester. Students may take up to four Theatre Production Labs.

Transfer Curriculum Goal(s): 6

THTR 1455 Script Analysis

Credits: 3

Prerequisite: none

Co-Requisite: none

This course introduces students to techniques directors, designers, actors, and dramaturgs use for analyzing, researching, and interpreting scripts in order to bring the script's themes, characters, and environments to life on stage. Students will critically analyze scripts from the different perspectives of directors, designers, actors and dramaturgs in order to see how different conclusions are reached from similar evidence, as well as how differing conclusions can be eventually reconciled with one another to produce a coherent whole.

Transfer Curriculum Goal(s): 2,6

THTR 1461 Acting I

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is designed to acquaint the student with the fundamentals of acting through a study of theory and lab experience. Recommended for students pursuing majors or minors in speech, theatre, English, or elemen-

tary education.

Transfer Curriculum Goal(s): 1

THTR 1462 Acting II

Credits: 3

Prerequisite: THTR 1461 or instructor's consent

Co-Requisite: none

This is an advanced course in acting, taking the Stanislavski acting method and concentrating on in-depth scene-work and critiquing.

Transfer Curriculum Goal(s): 6

THTR 1466 Acting Lab I

Credits: 1

Prerequisite: instructor's consent

Co-Requisite: none

Acting labs are for the rehearsal and performance of plays being presented by the Theatre Department. Rehearsal and performance schedules to be arranged.

Transfer Curriculum Goal(s): 6

THTR 1467 Acting Lab II

Credits: 1

Prerequisite: instructor's consent

Co-Requisite: none

Acting labs are for the rehearsal and performance of plays being presented by the Theatre Department. Rehearsal and performance schedules to be arranged.

Transfer Curriculum Goal(s): 6

THTR 1471 Theatre Production Lab I

Credits: 1

Prerequisite: none

Co-Requisite: none

This one credit class is for participating in any of the following technical area of the theatre: i.e. set construction, painting, lighting, sound, make-up, costuming, properties, front of house and stage crew. This course requires 30 hours of work over the course of the semester. Students may take up to four Theatre Production Labs.

Transfer Curriculum Goal(s): 6

THTR 1472 Theatre Production Lab II

Credits: 1

Prerequisite: none

Co-Requisite: none

This one credit class is for participating in any of the following technical area of the theatre: i.e. set construction, painting, lighting, sound, make-up, costuming, properties, front of house and stage crew. This course requires 30 hours of work over the course of the semester. Students may take up to four Theatre Production Labs.

Transfer Curriculum Goal(s): 6

THTR 1478 Technical Theatre

Credits: 3

Prerequisite: none

Co-Requisite: none

Technical Theatre is designed to give students a working practical knowledge of the technical element of a theatrical production. The course covers the proper use of tools, set construction and rigging, how to hang a light plot, property construction, painting techniques, theatre etiquette and safety.

Transfer Curriculum Goal(s): 6

THTR 1480 The Theatre Experience

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine the theatre-going experience, including audience etiquette, stage conventions, reading a play script, and analyzing a performance. The course will use a trip to New York City as an applied field trip. Plays will be selected on the basis of the New York theatre season offerings during the time of the trip. Travel expenses are extra.

Transfer Curriculum Goal(s): 6

THTR 1481 The Theatre Experience-

New York

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine the theatre-going experience, including audience etiquette, stage conventions, reading a play script, and analyzing a performance. The course will use a trip to New York City as an applied field trip. Plays will be selected on the basis of the New York theatre season offerings during the time of the trip. Travel expenses are extra.

Transfer Curriculum Goal(s): 6

THTR 1482 The Theatre Experience-

London

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine the theatre-going experience, including audience etiquette, stage conventions, reading a play script, and analyzing a performance. The course will use a trip to London, England as an applied field trip. Plays will be selected on the basis of the London theatre season offerings during the time of the trip. Travel expenses are extra.

Transfer Curriculum Goal(s): 6,8

THTR 1483 Honors The Theatre

Experience

Credits: 3

Prerequisite: Admission to the Honors

Program

Co-Requisite: none

This course takes students outside of the Brainerd Lakes Area giving them exposure to a select number of live theatre productions in the Twin Cities, Duluth, and /or other areas in the state of Minnesota. Students will experience these productions from "The Page to The Stage." Students will read the script, research the play and the production, and then see a live performance of the play. Students will also explore each of the productions in terms of human diversity: social and economic backgrounds, race, religion and gender. Students will then engage in a comparative analysis through class discussion and/or analysis papers. Ticket fees are extra.

Transfer Curriculum Goal(s): 6,7

THTR 1496 Summer Theatre Workshop

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a workshop in acting and/or technical areas of theatre performance and production. Activities and assignments will be determined by the needs of the shows in the summer theatre season.

Transfer Curriculum Goal(s): 6

THTR 1597 Topics in Humanistic Theatre

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will cover selected topics of interest in Theatre.

Transfer Curriculum Goal(s): none

THTR 1598 Topics in Humanistic Theatre

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Humanistic Theatre. On demand.

Transfer Curriculum Goal(s): none

THTR 2410 Children's Theatre

Credits: 3

Prerequisite: none

Co-Requisite: none

Children's Theatre is theatre written, directed, and produced for a young audience performed by adult actors. In this course students will participate in all phases of producing a children's theatre production as part of the Central Lakes College theatre season. This is a performance class.

Transfer Curriculum Goal(s): 6

THTR 2441 Directing for the Theatre

Credits: 3

Prerequisite: THTR 1451 or instructor's consent

Co-Requisite: none

This course is an introductory course in the fundamentals and methods of directing that includes choosing a script and analyzing and blocking it, in preparation for rehearsals and the final production.

Transfer Curriculum Goal(s): 6

THTR 2443 Creative Drama with Children

Credits: 3

Prerequisite: none

Co-Requisite: none

This course explores fun and exciting ways to teach young learners through dramatic activities and dynamic play. Creative Drama is an informal drama that is created for and by the players. There are no formal scripts and no formal audience; everyone is a participant. This is not a performance class. Because Creative Drama uses kinesthetic learning, the same type of learning that is used in sports, athletes do well in this class. The class works weekly with the College's Day Care Center, and students will learn to foster social skills and creativity in young children.

Transfer Curriculum Goal(s): 6

THTR 2450 Theatre History

Credits: 3

Prerequisite: none

Co-Requisite: none

This course is a survey of Western and Classical Asian theatre. Major periods and/or movements of theatre are discussed as they occurred chronologically. Analysis of the period's practices, practitioners, playing space and audience in the context of the cultural and societal forces of that period.

Transfer Curriculum Goal(s): 5,8

THTR 2466 Acting Lab III

Credits: 1

Prerequisite: instructor's consent

Co-Requisite: none

Acting labs are for the rehearsal and performance of plays being presented by the Theatre Department. Rehearsal and performance schedules to be arranged.

Transfer Curriculum Goal(s): 6

THTR 2467 Acting Lab IV

Credits: 1

Prerequisite: instructor's consent

Co-Requisite: none

Acting labs are for the rehearsal and performance of plays being presented by the Theatre Department. Rehearsal

and performance schedules to be arranged.

Transfer Curriculum Goal(s): 6

THTR 2471 Theatre Production Lab III

Credits: 1

Prerequisite: none

Co-Requisite: none

This one credit class is for participating in any of the following technical area of the theatre: i.e. set construction, painting, lighting, sound, make-up, costuming, properties, front of house and stage crew. This course requires 30 hours of work over the course of the semester. Students may take up to four Theatre Production Labs.

Transfer Curriculum Goal(s): 6

THTR 2472 Theatre Production Lab IV

Credits: 1

Prerequisite: none

Co-Requisite: none

This one credit class is for participating in any of the following technical area of the theatre: i.e. set construction, painting, lighting, sound, make-up, costuming, properties, front of house and stage crew. This course requires 30 hours of work over the course of the semester. Students may take up to four Theatre Production Labs.

Transfer Curriculum Goal(s): 6

THTR 2480 Theatre for a Diverse Population

Credits: 3

Prerequisite: none

Co-Requisite: none

This course brings together students with different learning styles, social skills and cultural backgrounds in order to explore relevant social issues. Through the use of literature, observation, creative writing, theatre games, communication exercises and life experiences students will develop and perform a theatre piece dealing with diversity and social issues.

Transfer Curriculum Goal(s): 6,7

THTR 2491 Theatre Independent Study

Credits: 1-3

Prerequisite: none

Co-Requisite: none

In this course the student will meet with the instructor several times and complete a mutually agreed upon theatre project.

Transfer Curriculum Goal(s): 6

Underwater Diving

UWDV 1300 Introduction to Diving

Credits: 1

Prerequisite: none

Co-Requisite: none

This course is designed to give students a general introduction to the opportunities available in the world of underwater diving. Students will be introduced to a brief history of diving, recreational and career opportunities, and available programs offered locally. No prerequisites.

Transfer Curriculum Goal(s): none

UWDV 1301 PADI Basic Open Water Diving

Credits: 4

Prerequisite: none

Co-Requisite: none

This course is designed to train students in basic open water diving through a combination of classroom work, confined water dives, and open water dives. Students will become familiar with the equipment, safety issues, and documentation involved with each dive. Lifetime International Diver Certification will be awarded upon successful completion of this course.

Transfer Curriculum Goal(s): none

UWDV 1302 PADI Advanced Open Water Diver

Credits: 2

Prerequisite: UWDV 1301

Co-Requisite: none

This course is designed to provide the student with an enjoyable, supervised means to gain practical experience needed after initial certification. Students will participate in various underwater tasks that broaden their awareness of their environment and their capabilities as divers. Prerequisites: PADI Open Water Diver or equivalent and 4 approved open water dives.

Transfer Curriculum Goal(s): none

UWDV 1303 PADI Rescue Diver Class

Credits: 3

Prerequisite: UWDV 1302

Co-Requisite: none

This course covers skills and knowledge necessary for performing diver rescues and assists, managing diving accident situations, rendering proper first aid and is necessary to qualify for PADI Divemaster training. Prerequisites: PADI Open Water Diver or equivalent, current CPR certification.

Transfer Curriculum Goal(s): none

UWDV 1304 PADI Divemaster

Credits: 5

Prerequisite: UWDV 1303

Co-Requisite: none

Divemaster training is the first leadership level in the PADI progression. The rating denotes an individual who has a high level of personal diving skill, has instructor-level knowledge of diving theory, has had significant training in how to assist an instructor during training activities, and is able to assume a role of responsibility for the welfare of other divers in his charge. This course is designed to train qualified individuals as supervisory personnel.

Transfer Curriculum Goal(s): none

UWDV 1305 Search and Recovery

Credits: 3

Prerequisite: UWDV 1302

Co-Requisite: none

This course covers the skills, knowledge, planning, organization, procedures, techniques, problems, hazards, and fun of search and rescue diving.

Prerequisites: PADI Advanced Open Water Diver or equivalent.

Transfer Curriculum Goal(s): none

UWDV 1306 Inland Commercial Diver Tender

Credits: 18

Prerequisite: UWDV 1301

Co-Requisite: none

This course is designed to train candidates to become commercial divers. The training is divided into three distinct areas: classroom, confined water, and open water. Classroom topics include: diving physics, physiology, dive medicine, U.S. Navy Diving Tables, record keeping, commercial air diving equipment, equipment maintenance, commercial diving procedures, rigging, diving tasks, diving environments, and OSHA, ADC, and ANSI standards. In the confined and open water portions, each candidate will have practical experience in diving, tending, rack box operations, record keeping, setting up and taking down dive stations, radio protocol, back-up diver, systems supervisor, and more.

Transfer Curriculum Goal(s): none

UWDV 1307 Advanced Underwater Burn and Welding

Credits: 6

Prerequisite: UWDV 1306

Co-Requisite: none

This course covers welding and burning techniques for the commercial diver. The course includes selection of underwater burning rods, electrodes, holders, cable size, power sources, and associated diving equipment, as

well as basic surface and underwater techniques, use of oxygen, amperage settings, OSHA health and safety requirements, trauma management, establishing a fire safe work zone, and practical underwater experience.

Transfer Curriculum Goal(s): none

UWDV 1308 Underwater Photography

Credits: 2

Prerequisite: UWDV 1301

Co-Requisite: none

This course covers photographic principles, composition, film types, strobe and available light photography, camera handling techniques, preparation, and care and maintenance of photographic equipment. Students are shown techniques to enable them to take underwater photographs that are properly composed, focused and exposed.

Transfer Curriculum Goal(s): none

UWDV 1309 Ice Diver Certificate

Credits: 2

Prerequisite: UWDV 1302

Co-Requisite: none

The purpose of this course is to familiarize divers with the skills, knowledge, planning, organization, procedures, techniques, problems, hazards, and excitement of diving beneath the ice.

Transfer Curriculum Goal(s): none

Videography

VPRO 1100 Media Script Writing

Credits: 3

Prerequisite: ENGL 1410 or ENGL 1422

Co-Requisite: none

This course covers the basics of creating scripts for communication in media arts. Emphasis is placed on the basic writing process (brainstorming, outlining, treatments, pitching and revision—individual and peer), followed by specific scripting formats. An understanding of the left-column/right-column dynamic will be stressed. Participants will gain knowledge of the concepts of parallel writing, left-column directions, incorporating sound bites, adaptive music and effective use of sound effects within script development. Programming areas include corporate communications, commercials/PSAs, documentary and narrative.

Transfer Curriculum Goal(s): none

VPRO 1110 Video Workflow

Credits: 4

Prerequisite: none

Co-Requisite: none

This course covers an entry-level curriculum of skills used by students to

produce motion pictures from inception to completed video. Students will produce commercials, corporate/industrial videos and narratives from start to finish. The process is emphasized, not the techniques. The production team of students will manage each step in the process. Each member of the team will complete the course with one or more portfolio videos.

Transfer Curriculum Goal(s): none

VPRO 1112 Basic Camera

Credits: 3

Prerequisite: none

Co-Requisite: none

This course will introduce incoming students to professional video camera operation. Safe handling of equipment will be emphasized throughout the course. Instruction will include those standard functions critical for professional-level operation; including focus, color balance, audio, exposure and adaptation. Basic shot composition and motion picture sequencing will be analyzed and applied.

Transfer Curriculum Goal(s): none

VPRO 1120 Interactive Design and Production

Credits: 3

Prerequisite: CART 2128

Co-Requisite: none

This course provides practical experience in the production and distribution of state of the art interactive media. Students will design and create interactive titles including DVDs, motion and after effects, and study the design principles used in successful interactive media development. Students will develop both tactile disc-based and network delivered media products.

Transfer Curriculum Goal(s): none

VPRO 1130 Creative Development

Credits: 2

Prerequisite: CART 2128

Co-Requisite: none

This course focuses on developing techniques in the development and use of creative content in the preparation of video projects. Students will compose unconventional scripts, employ arresting camera techniques and improvise new editing styles to create innovative videos.

Transfer Curriculum Goal(s): none

VPRO 1140 Producing and Directing

Credits: 3

Prerequisite: CART 2128

Co-Requisite: none

This course provides students the ability to become content providers,

or managing all production elements. Students will practice the art of pre-production, locating clients, setting up field shoots, managing and scheduling the workflow for production activities. Students will learn supervision techniques in the video making process while enhancing their problem solving skills and learning to negotiate post-production issues between production staff and clientele.

Transfer Curriculum Goal(s): none

VPRO 1290 Video Production

Internship

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

This course provides practical experience in the development, production and distribution of videos through an individualized occupational experience. The internship allows students to demonstrate their knowledge and skills, as well as learning new techniques and enhancing their skills in a job setting.

Transfer Curriculum Goal(s): none

VPRO 2110 Advanced Camera

Credits: 3

Prerequisite: VPRO 1110, VPRO 1112

Co-Requisite: none

Students will take videography to higher levels by learning to use specialty equipment/techniques, including jibs, cranes, Steadicams and creative hand-held devices. Mini-cams will be explored in a variety of Point-of-View settings. Advanced sequencing will be emphasized. Advanced camera menu functions will be explored throughout.

Transfer Curriculum Goal(s): none

VPRO 2112 Advanced Video Editing

Credits: 3

Prerequisite: VPRO 1110, VPRO 1112, CART 2128

Co-Requisite: none

Students will continue progress on video editing software techniques, emphasizing multiple layered compositions, special effects software, imported files, and using 3rd party plug-ins for exciting special effects. Storytelling techniques will be explored in detail and complex editing projects will be assigned.

Transfer Curriculum Goal(s): none

VPRO 2120 Interactive Design and Production

Credits: 3

Prerequisite: CART 2128, VPRO 1110

Co-Requisite: none

This course provides practical experience in authoring and managing all

visual media to various formats and platforms. Students will learn techniques in DVD authoring and menu controls, uploading to social media sites and web or presentation placement. They will study the design principles used in successful interactive media development.

Transfer Curriculum Goal(s): none

VPRO 2130 Creative Development

Credits: 5

Prerequisite: for 2nd year students only

Co-Requisite: none

This course focuses on completing the production circle for students by allowing them the opportunity to develop and produce their own video project from start to finish. Students will organize into 4-person (or less) teams, sharing all aspects of the production process. Each team will be responsible for concepting, budgeting, scripting, shooting and editing a film that can be presented as a portfolio finale.

Transfer Curriculum Goal(s): none

VPRO 2140 Business of Videography

Credits: 3

Prerequisite: VPRO 2110, VPRO 2112, CART 2128

Co-Requisite: none

This course provides students the ability to become content providers - managing all production elements. Students will practice the art of locating and pitching clients, setting up field shoots, managing and scheduling the workflow for production activities. Students will learn supervision techniques in the video making process while enhancing their problem solving skills and learning to negotiate post-production issues between production staff and clientele.

Transfer Curriculum Goal(s): none

VPRO 2150 Studio Productions

Credits: 3

Prerequisite: VPRO 1110, VPRO 1112, CART 1126

Co-Requisite: none

Students will manage studio broadcasts incorporating multiple studio processes, including multi-camera shoots, teleprompting, graphic input, set building, keying, audio mixing, switching and directing.

Transfer Curriculum Goal(s): none

VPRO 2350 Internship

Credits: 1-6

Prerequisite: instructor's consent

Co-Requisite: none

Internship is an elective opportunity

to earn college credit through an individualized occupational experience that recognizes knowledge and skills that can be learned on the job.
Transfer Curriculum Goal(s): none

Viticulture and Enology

VITI 1111 Intro to Viticulture and Vineyard Establishment
Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to introduce students to viticulture in general and to current practices for establishing a commercial vineyard. Topics covered include varietal selection, site preparation, equipment, site selection, first season establishment, vine growth development and training, trellis systems, weed control, vine disease control, and pruning for training purposes. Students are required to partner with an approved vineyard to participate in the required field experience portion of the course.

Transfer Curriculum Goal(s): none

VITI 1113 Winter Viticulture Technology
Credits: 2

Prerequisite: VITI 1111
Co-Requisite: none

This course is designed to provide students interested in the field of viticulture practical experience in winter vineyard operations. Students are required to collaborate with an approved vineyard to participate in the required field experience portion of the course, which will serve as work experience for those seeking employment in commercial viticulture.

Transfer Curriculum Goal(s): none

VITI 1114 Spring Viticulture Technology
Credits: 2

Prerequisite: VITI 1111
Co-Requisite: none

This course is designed to provide students initiated in the field of Viticulture practical experience in spring vineyard operations. Students are required to partner with an approved vineyard to participate in the required field experience portion of the course which will serve as work experience for those seeking employment in commercial viticulture.

Transfer Curriculum Goal(s): none

VITI 1115 Summer/Fall Viticulture Technology
Credits: 2

Prerequisite: VITI 1111

Co-Requisite: none

This course is designed to provide students initiated in the field of viticulture practical experience in summer/fall vineyard operations. Students are required to partner with an approved vineyard to participate in the required field experience portion of the course which will serve as work experience for those seeking employment in commercial viticulture.

Transfer Curriculum Goal(s): none

VITI 1146 Intro to Enology
Credits: 3

Prerequisite: Students must be of legal age to drink alcohol

Co-Requisite: none

This is a compacted 16-week course based on the fundamentals of science and technology of making wine. Introduction to Enology targets people who are interested in home winemaking and cellar employees interesting in a winemaking career and possibility to grow into the small business opportunity as well as cellar employees interested in winemaking career. During this course, students will build proper basic understanding of winemaking, which will alleviate common home winemaker's errors. This course is part of the VESTA's Viticulture and Enology program with emphasis on the practical aspects of growing grapes and winemaking.

Transfer Curriculum Goal(s): none

VITI 1147 Introduction to Fruit Wine Production
Credits: 2

Prerequisite: VITI 1146
Co-Requisite: none

This course includes the history of fruit wine making, starting a fruit winery, production processes, quality control, faults and flaws, stability tests, marketing and sales, and legal regulations. Students will get an understanding of the special idiosyncrasies of the various fruits available to make commercial grade fruit wine.

Transfer Curriculum Goal(s): none

VITI 1148 Winery Sanitation
Credits: 3

Prerequisite: VITI 1146
Co-Requisite: none

This is a course in the basic science and technology of winery sanitation. The course serves as an introduction to wine microbiology and covers all methods used for winery sanitation including premises, tanks, pumps, filters, oak barrels and sampling equipment, including but not limited to chemical agents, reagents, and ther-

mal treatments leading to sterile bottling. Environmental issues and compliance are also addressed.

Transfer Curriculum Goal(s): none

VITI 1160 Winery Equipment Operation
Credits: 2

Prerequisite: VITI 1146
Co-Requisite: none

This course covers process technologies and process systems used in modern commercial wineries. The course will include lectures, demonstrations, and two-day workshop. Overview of winemaking systems including work place safety, cleaning and sanitation procedures, winemaking equipment and materials, tanks, barrels and barrel alternatives, filtration systems, and bottling equipment. We will also touch on chillers, and electrical needs.

Transfer Curriculum Goal(s): none

VITI 1190 Vineyard Safety
Credits: 1

Prerequisite: none
Co-Requisite: none

This course will offer an introduction to safety and procedures specific to viticulture (grape growing.) Topics will include general history of agricultural safety and health issues, ergonomics, OSHA safety rules and other safety issues specific to viticulture.

Transfer Curriculum Goal(s): none

VITI 1210 Intro to Wine Microorganisms
Credits: 3

Prerequisite: none
Co-Requisite: none

This course is designed to introduce students to the basic principles of wine microbiology and to serve as an introduction to the variety of microorganisms frequently encountered in the wine making process. Yeasts, bacteria, and molds play vital roles in the production of wine, both beneficial and harmful. Students will become familiar with the morphology, reproduction, and sensory attributes of wine microorganisms in order to understand their influence on winemaking, and to be able to manage them effectively.

Transfer Curriculum Goal(s): none

VITI 1211 Integrated Pest Management
Credits: 2

Prerequisite: none
Co-Requisite: none

Effective grape production depends on the grower developing a system of grape management that is appropri-

ate for each vineyard. Decisions need to be made for how to manage all of the normal cultural practices such as planting, fertility, harvesting, and pruning as well as managing the insect, disease, and weed problems that occur either regularly or sporadically. The information in this course will address management issues related to common, expected pest problems as well as the occasional appearance of minor pest problems.
Transfer Curriculum Goal(s): none

**VITI 1213
Midwest Vineyard Management
Credits: 2**

Prerequisite: VITI 1111, VITI 1113
Co-Requisite: none
This course is a general study of vineyard management applicable to the Mid-America region, primarily Missouri, Kansas, Nebraska, Iowa and Illinois. The course primarily covers management of the mature vineyard. It does not go into detail concerning vineyard establishment which is addressed in the Vineyard Establishment and Maintenance VESTA Course, nor does it go into detail concerning pests and diseases which is addressed in the Integrated Pest Management VESTA Course.
Transfer Curriculum Goal(s): none

**VITI 1246 Intermediate Enology
Credits: 3**

Prerequisite: VITI 1146 or VITI 1268
Co-Requisite: none
The Intermediate Enology course is built on the fundamentals of science and technology of winemaking practices taught in Introduction to Enology course VIN 146. During this course, students will understand how the whole winemaking process works and learn the scientific background for any decision made during process of winemaking. At the completion of course the students will understand winemaking calculations necessary for accurate, precise and safe additions to the wine. This course is part of the VESTA program with emphasis on the practical aspects of growing grapes and winemaking.
Transfer Curriculum Goal(s): none

**VITI 1257 Fall Wine Production
Internship
Credits: 3**

Prerequisite: VITI 1146, VITI 1148, VITI 1160, VITI 1246
Co-Requisite: none
Principles of grape juice and wine analysis and the reasons for use of each analysis. Analyses of a practical and useful nature are chosen for the

laboratory exercises demonstrating various chemical, physical and biochemical methods. Students will participate in workshops and hands-on experiences at participating wineries.
Transfer Curriculum Goal(s): none

**VITI 1259
Cellar Operations Technology
Credits: 2**

Prerequisite: VITI 1146, VITI 1148, VITI 1160, VITI 1246, VITI 1268, VITI 1257
Co-Requisite: none
This course is designed for the individual anticipating a career in the wine industry. This course is designed to provide a student who has completed major course sequences, including a harvest internship, with a selection of practical and realistic winery cellaring experiences through bottling, sufficient to equip him/her with sufficient skills and work experience for an entry-level position in the wine industry. Students involved in this program will participate on a part time basis at a supporting winery, and are expected to use the time and opportunities to further their understanding of the winemaking process and common winery operations.
Transfer Curriculum Goal(s): none

**VITI 1266
Sensory Evaluation of Wine
Credits: 3**

Prerequisite: VITI 1146, must be legal drinking age
Co-Requisite: none
This is a course intended for those individuals who need to develop an understanding of the principles of sensory evaluation used in commercial wine making. It will also be of benefit to the wine enthusiast who is interested in reaching advanced levels of appreciation as well as to the producer, the wine merchant, and ultimately the enologist, who by the nature of their profession need to discern flavors and establish tasting benchmarks. Students will practice sensory analysis at home and in workshops to further their sensory evaluation skills and techniques.
Transfer Curriculum Goal(s): none

**VITI 1268 Wine and Must Analysis
Credits: 3**

Prerequisite: VITI 1146, CHEM 1414
Co-Requisite: none
Principles of grape juice and wine analysis and the reasons for use of each analysis. Analyses of a practical and useful nature are chosen for the laboratory exercises demonstrating various chemical, physical and biochemical methods. Students will par-

ticipate in workshops and hands-on experiences at participating wineries.
Transfer Curriculum Goal(s): none

**VITI 1270
Marketing for the Small Winery
Credits: 2**

Prerequisite: VITI 1146
Co-Requisite: none
This course will explore the marketing aspects of the wine industry. Focus is on the need for differentiation from competitors in angri-tourism. The outcome will include a public relations program for an existing or future winery.
Transfer Curriculum Goal(s): none

**VITI 1272 Winery Tasting Room
Management
Credits: 2**

Prerequisite: none
Co-Requisite: none
This course will explore the management of winery tasting rooms. Focus is on the customer service and customer loyalty.
Transfer Curriculum Goal(s): none

**VITI 1274 Wines of the World
Credits: 3**

Prerequisite: VITI 1266, must be of legal drinking age
Co-Requisite: none
This is a course intended for those individuals who wish to further their understanding of wine styles and builds on the knowledge developed in VIN 266, Sensory Evaluation. It is appropriate for commercial winemakers who wish to understand how the wines that they produce compare and contrast with the most popular and important wine styles around the globe. It will also be of benefit to the wine enthusiast who is interested in reaching advanced levels of appreciation and an understanding of global benchmarks. Students will practice sensory analysis at home to further their sensory evaluation skills and techniques.
Transfer Curriculum Goal(s): none

**VITI 1290 Winery Safety
Credits: 2**

Prerequisite: none
Co-Requisite: none
This course is an introduction to safety and procedures specific to enology (wine making). Topics covered will include general history of food and beverage safety and health issues, ergonomics, OSHA safety rules, and hazards specific to operating a winery.
Transfer Curriculum Goal(s): none

VITI 1293 Soils for Viticulture

Credits: 3

Prerequisite: none
Co-Requisite: none

The course will explore soil properties and behavior and their influence on wines. The course focuses not only on growth and production, but on the long-term effects of viticulture on soil quality and the wider environment.
Transfer Curriculum Goal(s): none

Welding

WELD 1100 Intro to Welding

Credits: 2

Prerequisite: none
Co-Requisite: none

This course is designed to give the student a working understanding of commonly used welding equipment and processes.
Transfer Curriculum Goal(s): none

WELD 1101 Shielded Metal ARC Welding

Credits: 4

Prerequisite: none
Co-Requisite: none

This course covers ARC welding power sources and safe operation. Techniques are developed with a variety of electrodes in different positions.
Transfer Curriculum Goal(s): none

WELD 1111 Blueprint Reading I

Credits: 2

Prerequisite: none
Co-Requisite: none

In this course the student will develop skills in practical blueprint reading, interpretation and development. Welding symbols are learned and drawings will be made. Projects will be developed, sketched and drawn. Industrial welding and assembly will also be studied.
Transfer Curriculum Goal(s): none

WELD 1112 Blueprint Reading II

Credits: 2

Prerequisite: WELD 1111
Co-Requisite: none

Students will study all aspects of metallurgical engineering including the three areas of extractive, mechanical, and physical metallurgy. Theory and applications of metallurgical principles as applied to the conditioning, design, identification, selection, testing, and processing of metals and alloys. Topics include heat treatment, crystal structures, phase diagrams, materials standards, specific alloys, nondestructive and destructive testing, and fabrication methods. The safe and proper operation of iron workers, sheet metal shears, oxy-fuel and plas-

ma cutting equipment will be taught. Both manual and automatic systems will be covered. Material handling techniques are also studied.
Transfer Curriculum Goal(s): none

WELD 1114

Metallurgy and Fabrication

Credits: 2

Prerequisite: None
Co-Requisite: none

Students will study all aspects of metallurgical engineering including the three areas of extractive, mechanical, and physical metallurgy. Theory and applications of metallurgical principles as applied to the conditioning, design, identification, selection, testing, and processing of metals and alloys. Topics include heat treatment, crystal structures, phase diagrams, materials standards, specific alloys, nondestructive and destructive testing, and fabrication methods. The safe and proper operation of iron workers, sheet metal shears, oxy-fuel and plasma cutting equipment will be taught. Both manual and automatic systems will be covered. Material handling techniques are also studied.
Transfer Curriculum Goal(s): none

WELD 1115 GTAW Gas Tungsten ARC Welding

Credits: 4

Prerequisite: WELD 1100
Co-Requisite: none

In this course all processes applied to many different types of metals and joints are covered in the classroom and are practiced in the shop.
Transfer Curriculum Goal(s): none

WELD 1117 Gas Metal ARC Welding

Credits: 3

Prerequisite: none
Co-Requisite: none

The study of welding wires, shielding gases and safe operation of power sources are taught. Close attention is given to technique, weld appearance and strength. The student will utilize both solid and cored wire.
Transfer Curriculum Goal(s): none

WELD 1128 Metal Fabrication

Credits: 4

Prerequisite: WELD 1111
Co-Requisite: none

Fundamental sheet metal layout, bend and forming allowances, safe operation of metal fabrication equipment, and a student fabrication project are the objectives of this course.
Transfer Curriculum Goal(s): none

WELD 1130

Advanced Welding Processes

Credits: 4

Prerequisite: WELD 1101, WELD 1117
Co-Requisite: none

Enhanced GMAW and GTAW will be performed on non-ferrous, ferrous, and stainless steel in this course. Casting repair, pressure vessel welding and testing are also performed.
Transfer Curriculum Goal(s): none

WELD 1132

Testing/Codes and Inspection

Credits: 2

Prerequisite: none
Co-Requisite: none

Students will study the major national codes that govern the welding industry, specifically the ASME pressure vessel code, the American Welding Society Structural Code D1.1, along with AWS codes. Students will also study the fundamentals of welding inspection techniques and the different types of destructive and nondestructive weldment testing.
Transfer Curriculum Goal(s): none

WELD 1134 Welding Qualification

Credits: 2

Prerequisite: WELD 1132
Co-Requisite: none

This course will prepare students for the completion of at least two advanced welding certification tests. Learners choose which certifications to obtain.
Transfer Curriculum Goal(s): none

WELD 1140 Trade Knowledge

Credits: 2

Prerequisite: none
Co-Requisite: none

This course develops the student's ability to follow instructions, interpret specifications, and use various hand and power tools required to make thread repairs, soldering techniques, and double flare steel tubing. Various types of math problems are also addressed.
Transfer Curriculum Goal(s): none

WELD 1150

Advanced Metal Fabrication

Credits: 4

Prerequisite: WELD 1112, WELD 1130
Co-Requisite: none

Students will develop and implement a plan to utilize all skills attained in math, electronics, welding, fabrication, metallurgy, and blue print reading to construct a final project per instructor's discretion.
Transfer Curriculum Goal(s): none

WELD 1350 Elective Open Lab I

Credits: 1-6

Prerequisite: none

Co-Requisite: none

With a plan in place between instructor and student, supervised lab experience is gained in this class.

Transfer Curriculum Goal(s): none

WELD 2370 Topics in Welding

Credits: 1-3

Prerequisite: none

Co-Requisite: none

This course will examine selected topics of interest in Welding. Offered on demand.

Transfer Curriculum Goal(s): none



COLLEGE IN THE SCHOOLS

College in the Schools Program

The College in the Schools (CIS) Program is a concurrent enrollment program administered by Central Lakes College (CLC) through the Minnesota State Colleges and Universities (MnSCU) P-16 Program Policies. Central Lakes College partners with high schools to provide them the option of strengthening their academic course offerings while providing high school juniors or seniors an opportunity to earn college credit. When enrolled in a CLC course through CIS, students are eligible to receive both high school credit and college credit.

College in the Schools, part of CLC's Division of Academic Affairs, is administered by the Director of Secondary Relations. Program courses are introductory college courses that have been approved for college credit as part of a degree or diploma program's required or elective credit options. Courses may be part of the Liberal Arts and Sciences or Career and Technical college curriculum. CIS courses are selected by each partnering high school. Credentialed high school instructors teach CIS courses.

CIS courses are taught during the regular high school day by exceptional high school instructors from high schools. CIS instructors are supported by CLC collaborating faculty. The course content, pedagogy, assignments, and assessments of CIS courses are the same as CLC's on-campus courses. All CIS courses are transcribed and become part of the student's permanent college record. Students successfully completing a course receive college academic credits which are transferable to other colleges and universities.

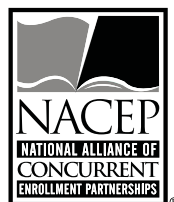
To be eligible for admission to the CIS Program, students must be a high school junior with a 3.0 cumulative grade point average or a senior with a 2.5 cumulative grade point average. As part of the CIS admissions process, students complete an application, provide a high school transcript, take the college assessment (Accuplacer), and complete a data enrollment form. In rare cases, students having

less than the required grade point average may appeal to enroll in the CIS Program. Students should contact their high school Counselor to complete the process.

Students enrolled in CIS courses follow all CLC academic and student policies, receive a college identification card and college email address, and are eligible for participation in college functions.

College in the Schools (CIS) Program is fully accredited by the National Alliance of Concurrent Enrollment Partnerships (NACEP). This accreditation demonstrates that the CIS Program at Central Lakes College meets or exceeds rigorous national standards of quality in the areas of curriculum, instructors, students, assessment, and program evaluation.

NACEP is a professional organization for high schools and colleges that fosters and supports rigorous concurrent enrollment. Established in 1999 in response to the dramatic increase in concurrent enrollment courses throughout the country, NACEP serves as a national accrediting body and supports all members by providing standards of excellence, research, communication, and advocacy. To learn more about NACEP or to view the NACEP standards, visit www.nacep.org.



COLLEGE IN THE SCHOOLS

Below is a list of College in the Schools courses. Please see the Course Descriptions section in this catalog for complete course descriptions.

Anthropology

ANTH 1457	Cultural Anthropology	(3cr)
ANTH 2411	Cultures of American Indians	(3cr)
ANTH 2425	Cultures of Latin America	(3cr)

Art

ARTS 1401	Black & White Photo I	(3cr)
ARTS 1403	Color Photo I	(3cr)
ARTS 1420	The Art of Digital Photography.	(3cr)
ARTS 1458	Drawing.	(3cr)
ARTS 1459	2-D Design & Color	(3cr)
ARTS 1467	Watercolor Painting	(3cr)
ARTS 1468	Painting.	(3cr)
ARTS 1470	Art Appreciation	(3cr)
ARTS 1487	Ceramics: Beginning Hand Building	(3cr)
ARTS 1488	Ceramics: Beginning Throwing	(3cr)
ARTS 1489	Intermediate Ceramics	(3cr)
ARTS 2401	Black & White Photo II	(3cr)
ARTS 2403	Color Photo II.	(3cr)
ARTS 2485	American Indian Art	(3cr)
ARTS 2486	Art History/Ancient.	(3cr)
ARTS 2487	Art History/Modern.	(3cr)
ARTS 2490	Art History/Non-Western.	(3cr)

Biology

BIOL 1404	Human Biology	(3cr)
BIOL 1411	Concepts of Biology	(3cr)
BIOL 1415	Environmental Biology.	(3cr)
BIOL 1431	General Biology I.	(5cr)
BIOL 1432	General Biology II	(5cr)
BIOL 2401	Nutrition	(2cr)

Business

BUSN 1102	Accounting for Non-Accountants.	(3cr)
BUSN 1501	Introduction to Business	(3cr)

Chemistry

CHEM 1405	Life Science Chemistry.	(3cr)
CHEM 1406	Life Science Chemistry Lab.	(1cr)
CHEM 1410	Environmental Chemistry	(3cr)
CHEM 1414	Fundamentals of Chemistry	(4cr)

College and Career Studies

CCST 1300	Transition to College for Students with Special Needs.	(2cr)
CCST 1510	College Success Skills.	(3cr)
CCST 1520	Career Planning	(2cr)
CCST 1558	Introduction to e-Learning	(1cr)
CCST 1559	Money Management Skills	(1cr)
CCST 1590	Service Learning and Civic Engagement.	(1cr)

Computer Technology

COMP 1101	Computer Fundamentals.	(3cr)
COMP 1120	Introduction to Computer Applications	(3cr)

Economics

ECON 1450	The American Economy.	(3cr)
ECON 2401	Principles of Economics-Macroeconomics.	(3cr)
ECON 2402	Principles of Economics-Microeconomics	(3cr)

Engineering

ENGR 1411	Engineering Physics I	(5cr)
ENGR 1412	Engineering Physics II.	(5cr)

English

ENGL 1410	Composition I.	(4cr)
ENGL 1411	Composition II	(4cr)
ENGL 1422	Practical Writing	(3cr)
ENGL 1450	Introduction to Humanities	(3cr)
ENGL 1452	Classical Mythology	(3cr)
ENGL 1454	Film Appreciation	(3cr)
ENGL 1463	Introduction to Literature	(3cr)
ENGL 1468	Poetry	(3cr)
ENGL 1469	American Short Story.	(3cr)
ENGL 2450	World Literature	(3cr)
ENGL 2451	Women in Literature.	(3cr)
ENGL 2455	American Indian Literature	(3cr)
ENGL 2457	British Literature Pre-1800.	(3cr)
ENGL 2458	British Literature 1800-Present.	(3cr)
ENGL 2467	American Literature Pre-1861.	(3cr)
ENGL 2468	American Literature 1861 - Present	(3cr)
ENGL 2483	Creative Writing	(3cr)
ENGL 2484	Advanced Creative Writing	(3cr)

Geography

GEOG 1400	Physical Geography	(3cr)
GEOG 1410	Maps and Place	(3cr)
GEOG 1421	World Regional Geography.	(3cr)
GEOG 1459	Cultural Geography.	(3cr)

German

GERM 1401	Beginning German I	(4cr)
GERM 1402	Beginning German II.	(4cr)
GERM 2401	Intermediate German I.	(4cr)
GERM 2402	Intermediate German II	(4cr)

Health

HLTH 1501	Personal Health and Wellness.	(3cr)
HLTH 1507	Drug Awareness	(3cr)
HLTH 2570	Topics in Health.	(1-4cr)

History

HIST 1406	Western Civilization, Pre-History to 1500.	(3cr)
HIST 1407	Western Civilization, 1500 to Present	(3cr)
HIST 1412	World History I, From the Beginning to 1500	(3cr)

COLLEGE IN THE SCHOOLS

HIST 1413	World History II, 1500 to Present (3cr)
HIST 1472	U.S. History to 1865 (3cr)
HIST 1473	U.S. History Since 1865 (3cr)
HIST 2404	Minnesota History (3cr)
HIST 2411	American Indian History (3cr)
HIST 2420	History of Women in the U.S. (3cr)

Math

MATH 1441	Concepts in Mathematics (3cr)
MATH 1460	Intro to Statistics (4cr)
MATH 1470	College Algebra (3cr)
MATH 1472	Precalculus (5cr)
MATH 1477	Calculus I (5cr)
MATH 1478	Calculus II (5cr)
MATH 1506	Beginning College Algebra (4cr)

Music

MUSC 1403	American Popular Music (3cr)
MUSC 1408	Community Band I (1cr)
MUSC 1409	Community Band II (1cr)
MUSC 1421	Cantare' Concert Chorale I (1cr)
MUSC 1422	Cantare' Concert Chorale II (1cr)
MUSC 1441	Applied Music - Guitar I (1cr)
MUSC 1442	Applied Music - Guitar II (1cr)
MUSC 1450	Music in World Cultures (3cr)
MUSC 1452	Intro to Music Industry (3cr)
MUSC 1453	Audio Recording I (3cr)
MUSC 1455	Voice Training (2cr)
MUSC 1457	Music Appreciation (3cr)
MUSC 1459	Fundamentals of Music (3cr)
MUSC 1475	Applied Music - Woodwind I (1cr)
MUSC 1476	Applied Music - Woodwind II (1cr)
MUSC 1481	Applied Music - Piano (1cr)
MUSC 1482	Applied Music - Piano II (1cr)
MUSC 1485	Applied Music - Instrumental I (1cr)
MUSC 1486	Applied Music - Instrumental II (1cr)
MUSC 1491	Applied Music - Voice I (1cr)
MUSC 1492	Applied Music - Voice II (1cr)
MUSC 2401	Evolution of Jazz (3cr)

Photo Technology

PHIM 1160	Basic Photo & Processing (3cr)
PHIM 1164	Survey of Imaging (2cr)
PHIM 1284	Digital & Video Photographics (4cr)

Physical Education

PHED 1502	Circuit Training (2cr)
PHED 1503	Advanced Circuit Training (1cr)
PHED 1505	Fitness Walking (2cr)
PHED 1506	Aerobic Exercise (2cr)
PHED 1508	Bicycling (2cr)
PHED 1510	Beginning Skiing/Snowboarding (2cr)
PHED 1511	Advanced Skiing/Snowboarding (2cr)
PHED 1512	Beginning Yoga (2cr)
PHED 1513	Aerobic Conditioning (2cr)
PHED 1514	Cardio Sampler (2cr)
PHED 1520	Advanced Yoga (2cr)
PHED 1521	Body Conditioning (2cr)
PHED 1522	Weight Training (2cr)
PHED 1523	Strength Training for Women (2cr)
PHED 1524	Recreational Sampler (2cr)
PHED 1525	Personal Protection Awareness (2cr)

PHED 1530	Beginning Swimming (1cr)
PHED 1531	Intermediate & Advanced Swimming (1cr)
PHED 1534	Beginning Golf (2cr)
PHED 1536	Advanced Golf (2cr)
PHED 1541	Bowling (2cr)
PHED 1544	Basketball - Coed (1cr)
PHED 1553	Power Volleyball (2cr)
PHED 1594	Fitness for Life (2cr)
PHED 2501	Varsity Sports - Football (1cr)
PHED 2502	Varsity Sports - Volleyball (1cr)
PHED 2503	Varsity Sports - Men's Basketball (1cr)
PHED 2504	Varsity Sports - Women's Basketball (1cr)
PHED 2505	Varsity Sports - Baseball (1cr)
PHED 2506	Varsity Sports - Softball (1cr)
PHED 2507	Varsity Sports - Golf (1cr)
PHED 2511	Varsity Sports - Football II (1cr)
PHED 2512	Varsity Sports - Volleyball II (1cr)
PHED 2513	Varsity Sports - Men's Basketball II (1cr)
PHED 2514	Varsity Sports - Women's Basketball II (1cr)
PHED 2515	Varsity Sports - Baseball II (1cr)
PHED 2516	Varsity Sports - Softball II (1cr)
PHED 2517	Varsity Sports - Golf II (1cr)

Physics

PHYS 1401	College Physics I (4cr)
PHYS 1402	College Physics II (4cr)

Political Science

POLS 1430	Introduction to Political Science (3cr)
POLS 1435	American Government & Politics (3cr)
POLS 1439	State and Local Government (3cr)
POLS 2401	Federal Indian Policy (3cr)
POLS 2402	Tribal Government (3cr)
POLS 2450	International Relations (3cr)

Psychology

PSYC 1411	Personal Growth & Behavior (3cr)
PSYC 1420	Psychology & Modern Life (3cr)
PSYC 2421	General Psychology (4cr)
PSYC 2431	Human Development (3cr)

Reading

READ 1401	College Reading (3cr)
READ 1500	Reading II (3cr)

Robotics

RAST 1110	Introduction to Manufacturing (2cr)
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Secretarial-Medical

SECM 1360	Medical Terminology (3cr)
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Sociology

SOCL 1401	Introduction to Sociology (3cr)
SOCL 1472	Sociology of the Family (3cr)
SOCL 2405	Criminology (3cr)
SOCL 2411	Social Problems (3cr)
SOCL 2422	Culture & Environment (3cr)
SOCL 2481	Race, Ethnicity & Oppression (3cr)

COLLEGE IN THE SCHOOLS

Spanish

SPAN 1401	Beginning Spanish I	(4cr)
SPAN 1402	Beginning Spanish II	(4cr)
SPAN 2401	Intermediate Spanish I	(4cr)
SPAN 2402	Intermediate Spanish II	(2cr)
SPAN 2403	Intermediate Spanish: Reading, Writing, Speaking	(2cr)
SPAN 2420	Many Faces of Mexico	(3cr)

Speech

SPCH 1410	Introduction to Communication Studies	(3cr)
SPCH 1421	Interpersonal Communication	(3cr)
SPCH 1431	Fundamentals of Public Speaking	(3cr)
SPCH 1450	Introduction to Mass Communication	(3cr)
SPCH 1451	Argumentation and Debate	(3cr)
SPCH 1464	Creative Communication	(3cr)
SPCH 1470	Blogging and Vlogging	(3cr)
SPCH 1472	Online Social Networking	(3cr)
SPCH 2421	Intercultural Communication	(3cr)
SPCH 2431	Small Group Communication	(3cr)

Welding

WELD 1100	Intro to Welding	(2cr)
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College Information

Learning Opportunities

Central Lakes College is a full-service, comprehensive community and technical college. We offer technical college and community college programs and courses from campuses in Brainerd and Staples.

As a comprehensive two-year college, we promote success for our students, businesses, and communities. Our dedicated and competent employees provide opportunities for students to prepare for the future by learning the knowledge, skills, and attitudes necessary for living and earning. We encourage and support cultural enrichment, life-long learning, civic responsibility, and community development. Our programs and services facilitate growth and development of individuals from diverse cultural, ethnic, economic, and educational backgrounds.

We award associate degrees, diplomas, and certificates in more than 60 majors. Some graduates of CLC transfer to Minnesota state universities or other colleges to complete four-year degrees. Other students take a career path from more than 40 professional programs leading immediately to rewarding employment. Anyone with a high school diploma or a GED may enroll. Even if you don't have a high school diploma or GED, you may still be admitted if you demonstrate the potential for being successful in college.

We are part of the Minnesota State Colleges and Universities system, which is a network of 31 two-year and four-year state colleges and universities serving about 250,000 students annually on 54 campuses in 47 communities in Minnesota.

Central Lakes College Values

These values guide individual and organizational behavior at Central Lakes College. We—

- Act with integrity
- Embrace diversity
- Act responsibly
- Communicate effectively
- Foster relationships
- Demonstrate fairness
- Celebrate achievement

Vision Statement

CLC, Minnesota's leading Community and Technical College for lifelong learning.

Mission Statement

We Build Futures. At Central Lakes College, we—

- are committed to a supportive environment for the growth and development of students from diverse cultural, ethnic, economic, and educational backgrounds
- offer liberal arts, technical education, and customized training programs of proven high quality that are accessible and affordable and that lead to employment, skill enhancement, or transfer to other institutions of higher learning
- anticipate and respond to the needs of business and industry in a globally competitive economy
- encourage and support cultural enrichment, life-long learning, civic responsibility, and community development

History

Central Lakes College was formed in 1995 to merge the strengths of the former Brainerd Community College and Brainerd Staples Technical College. Brainerd Community College had been established in 1938 as Brainerd Junior College. At that time, the college included both technical career programs and a college transfer program, all operated by the local school district. In 1963, Brainerd Junior College was chosen as the first member of the Minnesota State Junior College System to receive its own separate building. Brainerd Technical Institute remained as part of the school district.

The community college responded to 35 years of steady enrollment growth with building projects in 1969, 1971, 1974, 1989, and 1991. By 1992 the campus had grown to an enrollment of 1,800.

Brainerd Technical College was at that time called a technical "institute" and remained part of the school district until the merger in 1995. Brainerd Technical Institute and its sister institution, Staples Technical Institute (30 miles away in the historic railroad town of Staples), developed programs designed

to meet the changing needs of business and industry. In 1991, the State Board of Technical Colleges combined the administration of both schools, creating Brainerd Staples Technical College.

The Minnesota Legislature, meanwhile, began encouraging community and technical colleges to cooperate, and academic visionaries cited many advantages for consolidation. Brainerd Community College and Brainerd Staples Technical College volunteered to become one of the first merged colleges in the state and named Central Lakes College: A Community and Technical College.

In 1996, a \$24 million addition opened on the original Brainerd Community College campus. At that time, the former Brainerd Technical College programs physically joined with the former community college and moved to the expanded site nestled in a curve of the Mississippi River. Under one roof in Brainerd are state-of-the-art facilities occupying 350,000 square feet with cutting-edge educational tools, laboratories, and space to grow. A 4,500 sq. ft. music rehearsal hall addition opened in 2008.

At Staples, a 15,500 square foot West Campus Heavy Equipment Center, funded at \$1.72 million by the state, opened in 1999. A 30,000 sq. ft. maintenance facility opened in 2008, also on the Heavy Equipment campus. A well-equipped main campus addition in 1985 is also a training base for careers in demand. Started in 1950, the campus outgrew the original building. A completely new campus was built on the north edge of Staples near the Crow Wing River in 1971. The college has responded to educational trends by adding Web classes offered on the Internet, as well as evening and weekend courses.

Accreditation

Central Lakes College is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools located at:

30 North LaSalle Street, Suite 2400

Chicago, IL 60602-2504

Phone: 800.621.7440/312.263.0456

Fax: 312.263.7462

<http://www.ncahigherlearningcommission.org>

The college was originally accredited in 1977 and has been consistently accredited since that time. Our most recent visit of the NCA evaluation team was in 2002-2003, and the next comprehensive evaluation by NCA is scheduled for the year 2012. The college's goal is to maintain a 10-year accreditation status, which is the maximum designation awarded.

Scholarships

The Central Lakes College Foundation is a nonprofit 501C-3 organization formed to solicit, receive and administer gifts, grants, bequests and donations. It provides a tax-exempt vehicle for people to donate to the college and thereby provide educational opportunities for Central Lakes College students. Private and corporate contributions are critical to fulfilling the college's missions. Persons or groups desiring to contribute to the Foundation may contact the Foundation Director.

The mission of the CLC Foundation is to provide financial assistance in the form of scholarships to students at CLC. Scholarship applications are available through the Foundation office or can be submitted on-line at www.clcmn.edu/foundation.

Skone Family Conservatory Housing the Humphrey Center for American Indian Studies

The center bears the name of the late Pete Humphrey, whose collection of American Indian cultural materials and literature forms the heart of the center. The facility is part of the library in the east wing of the Brainerd campus. The main area is a museum housing interpretative displays on Ojibwe culture. It also includes more than 3,000 books research material, cultural resources, and programming on American Indian cultures and related issues.

**The Gordon Rosenmeier Center
for State and Local Government**
The Gordon Rosenmeier Center provides resources for students of CLC and citizens of Minnesota, with headquarters in the library at Central Lakes College, Brainerd campus. It focuses on history and public policy issues involving state and local government.

Resource Center for Cultures and Languages of the Americas (RCCLA)

This center is a hub for networking teachers, students and community members interested in issues related to the Americas. Its resources include bilingual materials (music, books, newspapers and videos), volunteer and educational listings, Spanish translation services, travel abroad and local speakers. Americas Topics include: Sweatshops, immigration, refugees, “Latino” cultures, bilingual education, Chicano literature, Spanish classics, politics, economic effects, and more.

RCCLA sponsors: Cultural Thursday presentations on the First Thursday of the month. Presentations are given by students, faculty or community on travel they have done. Countries are not exclusively from the Americas. We have literally traveled from Argentina to Zambia, with Cuba, Thailand, Vietnam, Poland, Israel, Peru and Palestine in between.

- Annual International Folk Dance
- Teacher seminars and materials for multi-cultural curriculum available.
- Multi-Cultural simulation game: BAFA-BAFA upon request. Come to your district, company, office. Inquire.
- La Mesa Española—weekly gathering of Spanish speakers for hour of practice.
- Exchange teacher programs through AFS and AMITY for on-campus personal study and tutoring.
- Annual Latino Festival held in the Fall to raise funds for CLC Scholarship.
- CLC Foundation Scholarship. Ask about Poland-Kurtz Latin American Studies Scholarship options for study/travel.

Watch for foreign film nights, specialized Spanish classes for the professionals, field trips and study abroad opportunities. Check the CLC Web page for updates and events or contact Jan Kurtz at 855.8183. RCCLA room and office are located in the Brainerd campus library.

Business & Industry Center

Customized Training provides leadership, resources, and training specifically tailored to meet the educational or training needs of

organizations served. Our training will help update, retrain, cross-train, and prepare your employees for advancement. CLC provides experienced professionals by using campus instructors and outside consultants to meet your training needs—our campuses, your place of business, off-site, on-the-job training—we will train at a location based on your needs. For a list of services see www.clcmn.edu or call 218-855-8139.

Small Business Development Center

The mission of the Central Lakes College Small Business Development Center (SBDC) is to provide quality business development assistance to existing and prospective businesses to promote growth, profitability, innovation, increased productivity, management improvement and economic development. For a list of services see www.clcmn.edu or call 218-855-8239. Policies and procedures are explained in section entitled “Admission to CLC”.

Admissions

Admissions Policy

Central Lakes College has an open admissions policy. The college serves students from a variety of educational backgrounds in keeping with its goals of providing a quality, affordable education.

Once admitted to CLC, students may enroll in any course or program as long as individual course prerequisites are met and space for effective instruction is available. The college will guide a student’s enrollment based on academic skills assessments, interviews, previous achievement and other criteria as explained in this section.

Students applying for the programs with selective admissions criteria may be required to take additional tests for admissions purposes. Students who do not meet the standards for admissions into a certain program may enroll in developmental courses designed to help them meet program qualifications.

Before registering for credit courses, a student must be admitted to the college. Application for admission can occur anytime during the year. Admissions policies and procedures are

explained in section entitled “Admission to CLC”.

Admission to CLC

It is the policy of Central Lakes College to admit students who are able to benefit from the educational offerings of our institution. Admission to CLC does not guarantee admission to a specific program. Fiscal and facilities considerations may limit admission to a particular program.

Admission Requirements:

1. Early application is recommended for best selection of classes at registration. A signed transcript release form is required for all applicants attending CLC.
2. A person who does not have a high school diploma or GED certificate (such as home-schooled students) must meet the federal and CLC “Ability to Benefit” criteria. See “Ability to Benefit” section for details.
3. On-line applications are available at www.clcmn.edu. Paper versions are available upon request.
4. Submission of a \$20 application fee. This is a required fee that is non-refundable. Students denied admission to the college due to program limitations may request a refund of the application fee from the College Business Office.
5. A high school student may be admitted as a PSEO student on the basis of:
 - a. College readiness as decided by the college, and/or
 - b. Recommendation by the student’s high school principal or designee.
6. Admission to the Heavy Equipment, Nursing, and Criminal Justice programs require additional criteria. Contact the Admissions Department for details.
7. Heavy Equipment Maintenance and Operation and Diesel and Heavy Equipment Mechanics students are required to take a drug test prior to registration for classes. Acceptance into a program major is on a space available basis. See “PSEO” section for details.

Application for Deferral

Central Lakes College’s admissions policy requires students to pay a non-refundable \$20 application fee prior to being admitted to

the college. However, under special circumstances, deferments may be approved due to financial hardship. Applications for deferment are available in the Admissions Office. Two official letters from a professional source indicating an inability to pay the fee must accompany application.

Immunization

Minnesota Law (M.S. 135A.14) requires that all students born after December 31, 1956 and/or graduated from high school prior to 1997 and enrolled in a public or private post-secondary school in Minnesota be immunized against diphtheria, tetanus, measles, mumps, and rubella.

The student must provide the college with immunization information required by law prior to the commencement of student’s second semester. A registration hold will be placed on records for students not providing immunization information.

The information is made available for review by the Minnesota Department of Health and the local community health board. Students wishing to file an exemption to any or all of the required immunizations should request a separate form for required physician and notary signatures.

Immunization Against Communicable Diseases

It is strongly recommended that all entering freshmen and transfer students be immunized for measles and rubella before they register for classes at CLC.

College Readiness Policy

Central Lakes College, in order to comply with the MnSCU Board Policy, 3.3.1, “Assessment for College Readiness,” requires students to complete an incoming student assessment or assess to appropriate levels on ACT.

The assessment includes reading, writing, and mathematics. It will be used to ensure that students have or develop the skills necessary to be successful with their college level curriculum.

Central Lakes College provides a college readiness curriculum to help unprepared students achieve college-level standards:

- Study Skills
- Basic Writing
- Basic Reading
- Basic Math

Students are encouraged to take College Readiness courses as early in their college career as possible. These College Readiness skills are prerequisites for some courses.

Assessment Department— Assessment Testing for College Readiness

Central Lakes College is dedicated to supporting student success. As part of that commitment to student success, Central Lakes College adheres to the MnSCU policy to assess the reading, writing and mathematical skills of new students in an attempt to match current skills with the CLC curriculum.

Part 1. Incoming Student Assessment

Subpart A. CLC shall require all students to complete incoming student assessment that includes measures of reading comprehension and mathematics on system-endorsed tests, except as provided in Subpart D. The incoming student assessment shall not be used to make college admissions decisions. Placements received as a result of assessment testing are mandatory.

Subpart B. Students with documented disabilities shall be tested with system-endorsed, adaptive tests through the Office for Students with Disabilities with necessary accommodations provided.

Subpart C. CLC shall provide an appeals process for students.

Subpart D. Exemptions: Students who have indicated on their admissions application that they are not seeking a degree, diploma, or certificate do not need to take the assessment tests unless they register for: (1) classes in English and mathematics; or (2) classes requiring a prerequisite based on scores/placements received during assessment testing. Information regarding prerequisites can be found in the course listing section of the semester schedule. (NOTE: Students indicating

that they are not seeking a degree, diploma or certificate are not eligible for financial aid.)

- Students enrolled in partnership agreements and/or management programs (FBM), non-credit continuing education or customized training classes are exempt from testing.
- Students with college-level coursework in English composition or mathematics shall have documented credits evaluated to determine exemption status. Students taking six or fewer credits within one term are exempt from testing unless they register for English or mathematics classes.
- Students may transfer assessment scores to CLC from other MnSCU institutions provided that they have been taken within the past two years on MnSCU system endorsed tests. Scores will then be evaluated for placement into CLC coursework.

Part 2. Minimum Standards for Access to General Education Courses

Subpart A. CLC shall adhere to MnSCU guidelines for placement into college level courses in reading and math.

Subpart B. Students placing below college-level coursework shall be placed into developmental coursework as indicated.

Subpart C. CLC instructors shall evaluate student's progress through curriculum and determine next sequenced placement.

Part 3. Developmental Education

Students placing into developmental education curriculum shall be provided coursework that will prepare them for entry into college level courses or technical/occupational programs.

Part 4. Annual Report on College Readiness

CLC shall annually report its assessment data, according to system reporting procedures.

Part 5. Definitions

System-Endorsed Tests: For native speakers of English, the system-endorsed tests are the Descriptive Tests of Language Skills and the Descriptive Tests of Mathematical Skills as developed by the College Board OR the computerized version of such tests, known as the Accuplacer CPTs (Computerized Placement

Tests). For non-native English speakers, the Test of English as a Foreign Language shall be used for assessment purposes.

- General Education: courses in the college-level curriculum in college mathematics and composition to which minimum reading standards apply will be determined by the Department of Academic Affairs.
- College Level: courses number 1000 or above which count toward the credit requirements of a certificate, diploma, associate degree, or baccalaureate degree.
- Developmental Education: courses numbered below 1000 intended for students who do not meet minimum assessment standards and which do not count toward a certificate, diploma, associate degree, or baccalaureate degree.

Assessment Testing Procedures

Part 1. Incoming Student Assessment

Subpart A. English as a Native Language. CLC shall administer the following tests to students who self-declare English as their native language (NL):

- Accuplacer/College Placement Tests
- Reading Comprehension 20 items
- Arithmetic 17 items
- Elementary Algebra 12 items
- College Level Mathematics 30

Tests take approximately 2 hours to complete including instructions, general information, grading and printing test results. The testing schedule is available at the Assessment Center.

Part 2. Accommodations

Students with documented disabilities should contact the Office for Students with Disabilities to complete testing accommodation arrangements.

Part 3. Appeals Process

Students will be informed at the time of testing and in CLC publications that they may retest if they believe their test results are not a valid reflection of their skills.

Retest

Within two working days, an Assessment

Center staff member will verify any prior testing by the student. A student may re-test only once within 90 days and no more than three times within a 12-month period. A schedule of retesting dates will be available. The cost to retest is \$ 15.00. The student must retest to college level or take the appropriate developmental course.

Part 4: Ability to Benefit Procedure

Students who do not possess a high school diploma or GED are required to meet minimum scores in all three tests. Those who do not meet minimum scores must retest within a 90-day period of the initial test. If an additional retest is requested, there is a waiting period of approximately three months (eleven to twelve weeks) as well as evidence of some instructional intervention that would suggest possible score improvement. A copy will be sent to the Director of Financial Aid. Minimum scores are those set by the Federal Government.

Part 5. Testing Exemptions

Exemptions to Assessment Testing for College Readiness based on completed degree, college transcript, or ACT/SAT subscores:

Subpart A. Students seeking exemption from testing based upon previous college coursework must submit their college transcript to the college for review. Assessment Center staff will review the transcript and will complete the Assessment Exemption Recommendation form. A copy of the transcript (with applicable coursework highlighted) will be attached to the form and will then be sent to the Registrar. A copy (without documentation) will also be kept at the Assessment Center.

Students holding a two-year or four-year degree from an accredited U.S. institution may be exempt from assessment testing and may be determined to meet the program entrance requirements for a technical program. Students must furnish documentation of degree status as outlined above. Assessment Center staff will complete the Assessment Exemption Recommendation form and proceed as above.

Students seeking exemption from testing based on ACT/SAT subscores that are within two years old must submit documentation

for review to Assessment Center staff. The Assessment Center will maintain a record of exemptions that have been granted for each testing area exempted as documented on the Assessment Exemption Recommendation form.

Subpart B. Students enrolled in partnership agreements and/or management programs (FBM), non-credit continuing education or customized training classes are exempt from testing.

Part 6. Establishing Minimum Standards for Access to General Education Courses

The Dean of Students will serve on the Developmental Education Committee of CLC and serves as the college liaison to CAPP Associates. The developmental coordinators will forward to the Dean of students the cut score placements for coursework by mid-February of each year. These scores will go into effect at the beginning of the fall testing term (July 1) and will remain in effect through the following spring term testing period. Math and English department faculty have evaluated acceptable student progress in developmental courses as A, A-, B+, B, B-, C+, and CNC for progression to the next sequenced placement.

Part 7. Developmental Education

Subpart A. Students shall enroll in the developmental coursework in which they were placed. Subsequent progression will be determined by the instructor and prerequisites. Students are not to retest with the placement tests once coursework has begun in that discipline. Retesting of current students will occur only if instructor recommended. For technical programs, students must meet the requirements to begin program coursework. If developmental coursework is required, developmental coursework must begin during the first semester of enrollment.

Part 8. Annual Report on College Readiness

CLC shall annually submit to MnSCU unit record data files on assessment test results, course placement or advisory standards, and criteria and number of exemptions to testing policy for research and evaluation purposes. Ability to Benefit reporting will also be completed annually.

Developmental Education

Part 1. Definitions

1. Developmental education is the program which enables students to improve basic learning skills in reading, writing, and mathematics, thereby furthering the achievement of personal educational objectives. Developmental education expands higher education opportunities to previously underserved and underprepared populations. Developmental education prepares students for rigorous academic experiences, has positive effects on underprepared student persistence, grade point average, and retention.

Part 2. Assessment Testing

Assessment testing for basic skills in the areas of reading, mathematics, and sentence skills will be administered to all new entering students. Students with disabilities may arrange for testing by contacting the Office for Students with Disabilities. Exceptions to this policy will be noted under Student Assessment policies. Assessment testing must be completed before registration. A student's math and English course enrollment will be canceled if the student does not enroll in the required courses.

Part 3. Developmental Coursework

Developmental courses have course numbers under 1000 and do not count toward credits in degree and diploma programs. These courses are provided at normal tuition and count toward financial aid eligibility. The College has identified minimum assessment standards required for enrollment in college-level courses in mathematics and English composition. Students are expected to complete their developmental coursework during the first year. This normally will necessitate enrollment in any required reading, writing, or mathematics courses in the first semester the student is enrolled.

Post Secondary Enrollment Options (PSEO) Procedures

The Post Secondary Enrollment Options program (PSEO) was established as an enrichment program for high school juniors and seniors. PSEO students are expected to perform to the standards to which the college's non-

PSEO students are held accountable. These include policies regarding academic standing and student conduct.

PSEO Admissions Criteria

A high school junior/senior applying as a PSEO student must meet the following criteria:

1. High School Grade Point Average: (SEE NOTE 1)
 - a. 12th grade/Senior must have a high school GPA of 2.5 or greater.
 - b. 11th grade/Junior must have a high school GPA of 3.0 or greater.
2. 10th Grade Career & Technical Education (SEE NOTE 1)
 - a. 10th grade/Sophomore: a student who is in 10th grade and has attained a passing score on the 8th grade Minnesota Comprehensive Assessment in reading.

Students who do not meet the standards listed above must request an appeal through the Admissions Department.

NOTE 1:

MNSCU PSEO Procedures

please visit <http://www.mnscu.edu/board/procedure/3-05p1.pdf> for the entire MnSCU Policy.

PSEO Admissions Process

1. Student applying as a PSEO student must provide the following information to the Admissions Department:
 - a. CLC Application for Admission
 - b. Completed PSEO form signed by student, high school official and parent (if under 18).
 - c. Current high school transcript
2. PSEO applicants are not required to submit the \$20 application fee.
3. Verification of College Readiness, completion of assessment or submission of ACT documentation.
4. PSEO students must attend a college registration session.

PSEO Enrollment Information

- PSEO students shall not register for developmental courses (college courses numbered below 1000 or Technical Education

courses numbered below 1000).

- PSEO students will register on assigned registration days according to total credits earned. Students must complete a post-secondary option form each semester, which must be signed by a high school official and parent (if under 18). This form must be submitted to the Admissions Department.
- PSEO students may be responsible for the costs of textbooks, materials and/or fees for certain courses. If you have questions regarding these costs, please contact the Business Office at cashiers@clcmn.edu or 218-855-8030.
- Post Secondary Enrollment Option (PSEO) students are allowed to charge required books and a reasonable amount of required supplies that will be used up in their courses. Books charged by PSEO students are the property of Central Lakes College. Books must be returned to the bookstore at the end of the semester.
 - a. PSEO students are not eligible for financial aid, CLC scholarships, or work-study.
 - b. PSEO students will be accepted into program majors only after all regular post-secondary students have been admitted.

PSEO Academic Standard for GPA and Course Completion

Once admitted to the college, PSEO students are required to maintain a minimum Grade Point Average and Course Completion Rate in order to continue their participation in the PSEO program. PSEO students must maintain a cumulative GPA of 2.0 (C average) in their CLC courses and complete 67% of the courses that they attempt. If a student falls below either of these levels, they will receive a letter indicating that they are dismissed from the PSEO program and must return to their High School. Under extraordinary circumstances appeal of dismissal from the PSEO program will be considered.

PSEO Admissions Appeal Process

PSEO applicants who do not meet the admissions requirements and are denied acceptance have the right to appeal the decision to the college. Applicants must submit their appeal by noon on the fifth day of the semester.

What constitutes an Appeal?

1. An appeal must include:
 - a. A statement by the student in writing defining how they can be academically successful as a PSEO student at CLC.
 - b. A letter of recommendation from the high school counselor or principal stating the student can be academically successful at CLC and that the high school supports the student's admission to the college.
2. The appeal must be submitted to the Vice President of Student Affairs by noon on the fifth day of the semester in which the application is seeking admissions. Appeals received after this deadline will not be considered for the current semester. Notification of the decision will be sent to the student and the high school counselor/principal no later than the end of the fifth day of the semester.
3. The Appeal must be sent to:

Central Lakes College
501 West College Drive
Brainerd, MN 56401
Office: 218-855-8037
Fax: 218-855-8220

PSEO Students with Disabilities

PSEO applicants with disabilities must follow the procedure outline for all PSEO applicants. Students wishing to receive disability services must provide the Office of Disabilities with current documentation. Students with disabilities, who are appealing a denial for admissions, may provide letters of support from their Special Education teacher for consideration.

Admission of Transfer Students

Students transferring to Central Lakes College from other colleges must request official transcripts of all previous college work be forwarded to the Central Lakes College Office of Students Records. Students who have attended other MnSCU institutions will have their transcripts automatically sent to CLC upon Admission. Students who have a suspension status at a previous college must

supply a college transcript and complete the appeal process available on the website at www.clcmn.edu.

Admission of International Students

International applicants (new and transfer) who are not permanent residents or citizens of the United States may be considered for admissions after submitting the following:

1. A completed International Student Application for Admission.
2. A non-refundable \$20.00 application fee (This fee will be assessed, however it does not need to be paid at time of application.)
3. Official transcripts from each high school/secondary school, college, university, and ESOL program attended. Transcripts must be translated into English, officially stamped, and mailed by the institution.
4. Documentation of English proficiency by providing one of the following:
 - a. Official TOEFL (Test of English as a Foreign Language) examination scores. Minimum composite score requirements are: 61 (internet based) 173 (computerized) or 500 (pencil/paper)
 - b. Official ESOL results from an ESOL center. Must have completed 109 for admissions or
 - c. A grade C or better in a college level English.
 - d. Completion of the ESOL Accuplacer assessment. ESOL students will be assessed in all areas of reading, writing, sentence meaning and listening. Eligibility for enrollment would be testing into ENGL 1510.
5. Financial Documentation: Declaration of financial resources in U.S. currency to ensure that there are sufficient funds available to cover applicant's school and living expenses for one year. Please note that students can not rely on financial aid from the college or employment in the U.S. as a source of income.
6. U.S. Form I-134 Affidavit of Support is required if a third party will be providing some or all support while attending CLC.

Application Deadline:

Fall Semester: May 1

(F-1 Transfer students – July 1)

Spring Semester: October 1

(F-1 Transfer students – December 1)

International students on an F-1 visa must:

1. purchase the MnSCU International Student Accident and Illness Insurance Plan upon enrollment.
2. provide written proof of immunization against diphtheria, tetanus, measles, rubella, and mumps as required by Minnesota Law (M.S. 135A.14)
3. be enrolled full time completing at least 12 credits each term.
4. pay tuition in full by required due dates.

Admission of English as a Second Language and Other Language Learners

English as a Second Language and other language learners (ESOL) services at Central Lakes College are designed to assist limited English speakers from different ethnic and cultural backgrounds to be successful in the college environment. Naturalized citizens or resident aliens, requiring ESOL services and seeking admission to the college may be considered for admission after submitting the following:

1. A completed Application for Admission.
2. A non-refundable \$20 application fee.
3. A high school diploma, G.E.D., or have passed the 'Ability to Benefit' testing. Official school transcripts from high school or postsecondary institution; transcripts must be translated into English and officially stamped and mailed.
4. Written proof of immunization.
5. Documentation of English proficiency by providing one of the following:
 - a. Official TOEFL (Test of English as a Foreign Language) examination scores. Minimum composite score requirements are: 61 (internet based) 173 (computerized) or 500 (pencil/paper)
 - b. Official ESOL results from an ESOL center. Must have completed 109 for admissions or
 - c. A grade C or better in a college level English.
 - d. Completion of the ESOL Accuplacer

assessment. ESOL students will be assessed in all areas of reading, writing, sentence meaning and listening. Eligibility for enrollment would be testing into ENGL 1510.

Students who are unable to meet the acceptance criteria may appeal.

Students who are unable to meet the acceptance criteria for Admission may appeal for admission into Central Lakes College. For more information, please contact the Central Lakes College Admissions Department.

Determination of Residence

1. Students who seek to qualify for in-state residence status must meet the following threshold requirements:
 - a. Students must have resided in Minnesota for at least one calendar year immediately prior to applying for in-state tuition; and
 - b. Residence in Minnesota must not be merely for the purpose of attending a college or university.
2. Each of the following additional facts and circumstances will be considered when responding to a petition for in-state tuition. No one of these factors is either necessary or sufficient to support a claim for in-state tuition:
 - a. Continuous presence in Minnesota during the period when not enrolled as a student;
 - b. Sources for financial support are generated within Minnesota;
 - c. Domicile in Minnesota of family, guardian, or other relatives or persons legally responsible for student;
 - d. Ownership of a home in Minnesota; and
 - e. Permanent residence in Minnesota.
3. The following circumstances, standing alone, shall not constitute sufficient evidence of domicile to affect eligibility for in-state tuition under these regulations but may be considered as part of the demonstration of the facts and circumstances listed above:
 - a. Voting or registration for voting;
 - b. The lease of living quarters;
 - c. A statement of intention to acquire a domicile in Minnesota;

- d. Domicile of student's spouse in MN.
- e. Automobile registration; and
- f. Other public records, e.g., birth and marriage records.

Students determined to be a non-residents at the time of application, may appeal their residency status by completing a Petition for Resident Status form. This form is available in the office of admissions and must be completed prior to the end of the fifth day of the semester.

Appeal: An appeal must be submitted in writing along with supporting documentation no later than 10 working days from denial of resident tuition status. The appeal will be reviewed by Director of Admissions and Dean of Student Affairs. Written notification of results of appeal will be mailed within 20 days of receipt of the appeal.

Reciprocity

Residents of South Dakota, North Dakota, Wisconsin, and Manitoba, Canada are eligible to attend Minnesota public institutions under the reciprocity agreements with the State of Minnesota. Application forms are available on-line at www.mnseo.state.mn.us. CLC charges in-state tuition to all students unless another state's reciprocity agreement dictates otherwise.

Midwest Student Exchange

Residents of Kansas, Michigan, Missouri, and Nebraska are eligible to attend Minnesota public institutions under the Midwest Student Exchange Program. Residents of these states may attend Central Lakes College at a tuition rate 50% above resident tuition. Further information may be obtained from the Admissions office.

Returning/Re-Admit Students

A CLC student who has not attended the college for one year or more will be classified as a returning student. In order to be re-admitted, a returning student must complete the EZ Enrollment form and submit to Admissions department. Students who are on suspension status, have outstanding financial obligations, or possess other encumbrances must clear their status before re-enrollment. A returning student must comply with the program major

requirements and policies which are in effect when returning to college.

Senior Citizen Admission

Senior citizens who are 62 years of age or older are eligible to enroll for classes on a space-available basis. An administrative fee of \$20 per credit plus associated fees are required if a course is taken for college credit. Senior citizens may audit a course for no grade. The administrative fee will be waived, but associated fees will be assessed.

Ability to Benefit

Central Lakes College policy states that any student without a high school diploma or GED certificate, regardless of the number of credits he/she is enrolling in or regardless of whether he/she is receiving financial aid, is an Ability to Benefit student. Students are required to complete the Accuplacer Assessment and score at specified levels prior to acceptance at CLC.

Ability to Benefit testing is administered by Lynn Anderson 218-855-8254 at Brainerd campus and Gayle Wonders 218-894-5114 at Staples campus. Students who complete the test with the appropriate scores will continue through the Admissions/ Orientation /Registration process. Students who do not complete the test with the appropriate scores will have the following options:

1. Retake the test in the areas not passed. (One retest within 90 days is allowed).
2. Enroll in up to five credits of classes to build necessary skills. (No Financial Aid available)

Home-Schooled

Students who are schooled at home and who do not have a high school diploma or its equivalent (GED) may be admitted to the college with special student status in the same manner in which Ability to Benefit students are admitted. Students who are schooled at home and are entering under Post Secondary Option will follow the PSEO Student Admission Policy. Home-schooled students are required to submit Immunization form to Admissions department.

College in the Schools (CIS)

The College in the Schools Program (CIS) was established as an enrichment program for juniors and seniors giving them an opportunity to take college classes in their high schools. Students are expected to perform to the standards to which the college's non-CIS students are held accountable. These include policies regarding academic standing and student conduct.

College in the Schools Criteria

A high school junior/senior applying as a CIS student must meet the following criteria:

1. High School Grade Point Average:
 - a. 12th grade/senior must have a GPA of 2.5 or greater
 - b. 11th grade/junior must have a GPA of 3.0 or higher
 - c. A score of 78 or higher in Reading on Accuplacer

CIS Enrollment Information

1. Students must submit an application and high school transcript to the representative at their high school. Students are not required to pay \$20 application fee.
2. CIS students receive books at no cost for their classes and are required to return the books to the college at the end of the semester.
3. CIS students are not eligible for financial aid, CLC scholarships or student employment.

CIS Admissions Appeal Process

CIS applicants who do not meet the admissions requirements and are denied acceptance have the right to appeal the decision. Students will contact their high school representative for details on appeal process.

What constitutes an Appeal?

An appeal must include:

A letter of recommendation from the high school counselor or principal stating the student can be academically successful at CLC and that the high school supports the student's admission to the college. CIS Academic Standard for GPA and Course Completion
CIS students are required to maintain a minimum grade point average and course completion rate in order to continue their par-

ticipation in the program. CIS students must maintain a cumulative GPA of 2.0 (C average) in their CLC courses and complete 67% of the courses that they attempt. If a student falls below either of these levels, they will receive a letter indicating that they are dismissed from the PSEO program. Under extraordinary circumstances appeal or dismissal from the CIS program will be re-considered.

Registration

Academic Grading System

The college operates on a semester system. After each semester students may retrieve their grades from the Central Lakes College web site www.clcmn.edu/registration.

The following grades are used at CLC:

Grade	GPA	Description
A	4.0	Excellent
A-	3.67	
B+	3.33	Above Average
B	3.0	
B-	2.67	
C+	2.33	
C	2.0	Average
C-	1.67	
D+	1.33	Minimum Passing
D	1.0	
D-	.67	
F	0.0	Failing (For courses #1000 level or above)
FN	0.0	Non-attendance
FW	0.0	Withdrawal
S	0.0	Satisfactory
U	0.0	Unsatisfactory
W	0.0	Withdraw (Student generated)
I	0.0	Incomplete
IP	0.0	In Progress
AU	0.0	Audit (Must be student generated at time of registration)
NC	0.0	No Credit (For courses numbered below 1000)

Definitions:

- The "I" grade is an agreement between the faculty member and the student. The student may be given up to one semester to complete the course requirements. An instructor will submit a grade change once

the course requirements have been met. Students not completing the course requirements after the one semester will automatically receive an “F”.

- Students who have not attended the first 5 days of class will receive an “FN” grade and will not receive financial aid for this class.
- The “FW” grade means the student stopped attending class prior to 60% of the term being completed.
- The “S” grade represents average achievement of “C” or above. Arrangements for “S” grades must be made with the instructor. Credits of “S” will be limited to 30% of the total credits for the degree, diploma, or certificate.
- The “AU” grade means the student will audit the class. At the time of registration the student must indicate that he/she chooses to audit a class. The audit permits attendance and participation in course activities. No credit is earned for the audited course, and financial aid does not cover the course. However, tuition and fees remain the same. Regular attendance without registration is not authorized.
- Credit: The unit by which academic work is measured.
- Registered Credits: The total number of credits for which a student is officially enrolled at the end of the registration drop/add period of each semester.
- Earned Credits: Successfully completed credits.

Grade Point Average (GPA)

The grade point average (GPA) is determined by adding all grade points earned and dividing by the sum of all credits attempted in courses where letter grades of A, B, C, D, or F were received. Courses with grades of I, W, IP, S, U, AU, NC, and all transfer grades do not apply toward GPA calculations. A semester example is shown below.

Grades	Points	Credits	Points
A=	4.00 x	3=	12.00
B=	3.00 x	4=	12.00
C=	2.00 x	4=	8.00
D=	1.00 x	3=	3.00
F=	0.00 x	1=	0.00
	Total	15=	35.00
	GPA=	35/15=	2.33

Both the term GPA and the cumulative GPA show on a grade report and a transcript. Students who do not maintain a 2.0 or higher cumulative GPA will be put on academic probation/suspension. A cumulative 2.0 GPA is required for graduation.

Add/Drop Courses

Students are entitled to have the opportunity to attend one class session for each registered, for-credit course, without obligation.

- Students are permitted to add and drop courses up to the first five days of the semester, or one business day after the first class meeting, whichever is later.
- Students are financially obligated for any classes not dropped after the fifth business day of the term, or one business day after the first class session, whichever is later and students are not able to have those courses removed from their academic record. For purposes of this policy, business days are defined as Monday through Friday (excluding posted holidays).

Address Changes

Students may now change their address and phone number online www.clcmn.edu/registration. Students are responsible for keeping their address current with Central Lakes College.

Appeal For Tuition/Fees Refund

After the drop/add period has expired, a refund of all or part of the tuition paid may be given under certain circumstances. Students may apply for an Administrative Refund for the following reasons only:

- Death in the immediate family (that can be documented).
- Medical Reasons: injury or illness that requires a prolonged absence. A doctor’s statement, on physician’s letterhead, is required and must declare that the medical condition impairs the student’s ability to attend or complete classes.
- Significant Personal Circumstances (that can be corroborated by an independent professional, such as a social worker, lawyer or law enforcement agent).
- Natural Disaster or other similar situation (that can be documented).

- Military duty (letter of assignment or notice of re-call is required).

If an Administrative Refund is granted, classes are dropped, no grades are awarded and the student's transcript is not impacted. Appeal forms are available from the Business Office. Forms must be completed and signed by the student. Appeals must be made within 90 calendar days of the end of the semester for which the debt was incurred. No appeals will be considered for debt greater than 90 days old. A committee reviews all Administrative Refund Appeals.

*In the case of illness or injury, a family member is defined as the spouse, minor or dependant children/stepchildren/foster children (including wards and children for whom the student is legal guardian), or parent/step-parent living in the same household as the student.

**In the case of death, a family member is defined as the spouse or domestic partner, the parents and grandparents of the spouse, the parents/step-parents, grandparents, guardian, children, grandchildren, brothers, sisters, wards, or stepchildren of the student.

Financial aid is based on the number of registered and paid credits. If a tuition appeal is approved, a student's financial aid may be reduced, which would require the student to repay a portion of his/her financial aid. Students need to contact the Financial Aid office before applying for a tuition refund to determine if their aid package will be impacted.

Cancellation of Classes

There are times when classes may be canceled as a semester course offering. Many factors are considered before a class is canceled.

Three major factors are:

1. Instructor availability. Sometimes it is necessary to cancel a class because a qualified instructor is not available.
2. Low enrollment. The general rule is that a class may be cancelled if it has less than 50% of its capacity registered for it.
3. Room/time conflicts. Class changes or additions may trigger a need to cancel or move certain classes.

Every effort will be made to minimize the frequency of cancellations.

Classification of Students

Students are not required to take a minimum number of credits each semester. However, to make progress toward the completion of a 60-credit associate degree or diploma within a two-year time frame, students must complete an average of 15 credits each semester. Students planning to take more than 19 credits fall and spring semesters and more than 9 credits summer semester must obtain approval from a counselor. For reporting purposes, students are classified according to the following:

- *Full-time*: A student who is enrolled in at least 12 credits during a semester.
- *Part-time*: A student who is enrolled in 11 or fewer credits during a semester.
- *Freshman*: A student who has completed 29 or fewer semester credits.
- *Sophomore*: A student who has completed 30 or more semester credits.

Visiting Students

Central Lakes College allows students registered at other MnSCU Colleges and Universities to register for courses at Central Lakes College as long as those courses traditionally have not had demand from Central Lakes College admitted students which historically had exceeded available seating capacity in the course.

Visiting Students are not required to pay an Application Fee to Central Lakes College to register for their selection of courses and are permitted to register for a maximum of 22 credits among all MnSCU colleges and universities. Visiting Students are not eligible for Financial Aid at Central Lakes College, but may be eligible for federal financial aid at their home college or university.

Graduation Requirements

Candidates for degrees, diplomas, and certificates must comply with the following criteria:

1. Complete all degree, diploma and certificate program requirements. Credits must be earned in courses numbered 1000 or above.

Note: Students are subject to the require-

ments in their program in effect at the time of their enrollment. When enrollment has been broken for one year, the student is subject to the degree, diploma, or certificate requirements as stated in their program that is current at the time of re-enrollment.

2. Achieve a cumulative grade point average (GPA) of 2.0 or better on a 4.0 grading scale.
3. Fulfill all financial obligations to the college.
4. Complete one-third of their credits at Central Lakes College. For programs exceeding 60 credits, a maximum of 20 semester credits must be completed at Central Lakes College. Credits of "S" will be limited to 30% of the total credits for the degree, diploma, or certificate.
5. Submit an "Application for Graduation" form to the Records and Registration office the semester before graduation.
6. Nursing students need a "C" in all courses.
7. Students who receive a 3.25-3.74 Cumulative GPA will graduate with honors. Students who receive a 3.75-4.0 Cumulative GPA will graduate with high honors.

For the graduation ceremony, honors and high honors are determined at the end of fall semester. At this time, spring grades are not included.

Program Major Changes

Students who are planning to change programs need to follow the following process:

1. Complete a Program Change form (available in the Admissions office).
2. It is recommended that students meet with a counselor in the Counseling Center to discuss a program change.
3. Submit the completed Program Change form to the Admissions office.

Students are accepted into programs on a first-come, first-serve basis by the date of application or by the date of the Program Change form. Students who do not follow the proper procedure to change programs may be placed on a waiting list for their desired program if space is not available.

Records & Registration Online

Many of the Records & Registration services such as adding and dropping courses, changing your address, and printing your own unofficial transcript are now available on the Web.

To access registration services on the Web you will need your: CLC Student Tech ID & Password. Your student tech ID is found on your CLC picture ID or your printed class schedule. Your Password is considered your "signature". Passwords must be kept confidential since they will allow anyone who knows them to access your private data. If you forget your Password, contact the Records & Registration Office in person or call 218.855.8031 or 800.933.0346 or visit E -Services and click on "Forgot Password". For Records & Registration Services on the Web, go to: www.clcmn.edu and click on the e-services. Enter your tech ID and Password and click "Login now."

To register for classes:

- Click on the "Courses and Registration" bar on the left side of the screen.
- Click on "Quick Add" (Register) or "Find a Course".
- Choose the correct term.
- Enter the 6-digit Course ID for each class you want.
- Click "Register Now".
- Check to make sure you have entered the correct classes.
- Click "Register" for these courses.
- Enter your Password and click "Register".
- Print.

To check grades:

- Click on "Grades and Transcripts" on the left side of the screen.
- Choose appropriate semester from the drop-down list.
- Click on "Continue".
- Your courses, grades, term GPA and cumulative GPA will be displayed on the screen.

Registration Procedures

Students may register for courses by using the CLC Web site: www.clcmn.edu/registration.

Registration procedures vary depending upon whether you are a new, returning, or

continuing student. As a new student, once you have completed the application and assessment processes, you will be contacted for an orientation/registration session where you will meet with a counselor or advisor to assist you in class selection.

The college reserves the right to withhold registration privileges from students with unpaid college financial obligations. Students who wish to enroll in more than 19 credits fall or spring semester, must have a 'Request for Additional Credits' form signed by a counselor.

Students who wish to enroll for more than 9 credits during the summer semester, must have a 'Request for Additional Credits' form signed by a counselor.

Repeating A Course

A course may be repeated for an improved grade. Only the highest grade earned will be counted toward a degree and in the computation of the overall numerical grade point average. This policy applies to all grades including "F" grades. However, both the original and the repeated grade will appear on the student's transcript. Tuition and fees will be charged each time.

Repeated coursework is not automatically updated on a student's record. A student who is repeating a course should fill out a "Course Repeat" form, available in the Records and Registration office and at www.clcmn.edu/registration/forms.html in electronic and PDF format.

Transcript Requests

The Records and Registration office maintains student academic records. Transcript records show all course work for which a student was registered during each term of enrollment and the grades awarded for those courses. Requests for transcripts can be made in person, by fax, or mail. Transcript requests will not be accepted via e-mail.

If you need an official Central Lakes College (CLC) transcript sent to a Minnesota State College or University, that institution may be able to obtain your CLC transcript electronically without requesting CLC send them

a transcript. Please contact that institution directly for further information. A complete listing of the MnSCU colleges/universities can be found at www.mnscu.edu/campuses. Unofficial Transcripts may be obtained on the CLC registration Web site www.clcmn.edu/registration. Students will need their Student Tech ID and Password to access their transcripts.

All official transcript requests must be signed, dated, and include the following:

- Complete name and current address
- Student's social security number
- Program and date of last attendance
- Address where transcript is to be mailed

Transcript Request forms may also be submitted electronically from the Central Lakes College registration web site www.clcmn.edu/registration/forms.html

Transcript Hold

Academic student transcripts are not released for students with financial obligations. This includes unreturned library materials, media equipment, and physical education equipment and unpaid tuition, fees, or bookstore charges.

Transfer of Credit

Students seeking a degree, diploma or certificate who have attended a previous college must have all official transcripts sent directly from that college to Central Lakes College Records and Registration. If the transcript is hand-delivered by the student, it must be delivered in an unopened college envelope. Student copies and faxed transcripts are not considered official. A course syllabus or course outline may be requested to determine course transferability.

Courses completed from colleges or universities which do not possess regional accreditation will be considered on an individual basis for evaluation but do require a syllabi or course outline for the course. Other documentation may be required. Transfer decisions may be appealed: To appeal a transfer decision a student may appeal to the Registrar by completing the General Petition form and complete a system level appeal to the Minnesota State

Colleges and Universities afterward if their concerns were not resolved by the Registrar. If the student's intent is to submit a system level appeal, they should first consult the Registrar for assistance related to this process. Transfer of credits shall be accomplished in accordance with Minnesota State Colleges and Universities policy and the policy of Central Lakes College. Once a course has met the criteria necessary for inclusion in the Minnesota Transfer Curriculum in any area of emphasis, the course must be accepted for full credit in that area of emphasis at all Minnesota State Colleges and Universities.

Lower division courses (100, 200, or 1000, 2000 numbered) completed with a grade of "D-" or better at regionally accredited colleges will be accepted in transfer. Regional accreditation from the institution/college has to be in effect at the time the student took the course(s). "S" grades will be accepted if the transcript legend designates the "S" grade equals a "C" grade or higher. Not more than six upper-division (300, 400 or 3000, 4000 numbered) semester credits may be used in transfer.

Law enforcement students seeking the Minnesota Post licensing: Only credit for law enforcement courses completed within three years of the request of transfer will be accepted in transfer.

RN students: Only microbiology courses that include a lab will be accepted in transfer. Transfer credit requests should be done prior to registering for classes. Once a transcript reaches CLC, evaluation of the transfer credits is done by the Registrar's Office.

Transfer of Credit/General Information

The following information applies to Minnesota's public colleges and universities.

1. Once a course has met the criteria necessary for inclusion in the Minnesota Transfer Curriculum in any area of emphasis, the course must be accepted for full credit in that area of emphasis at all Minnesota State Colleges and Universities:
2. Students are encouraged to ask for help from the registrar or transfer specialist

located at each college.

3. Students are encouraged to ask the transfer specialist for information about agreements between colleges for the transfer of credit.
4. Students need to understand the criteria for admission to the institution or selected major field of study.
5. Students need to understand what kinds of courses an institution will accept in transfer.
6. Students need to understand the appeals process at the institution to which transfer credits are to be sent.
7. The receiving college or university decides what credits transfer and whether those credits meet its degree requirements. The accreditation of both the sending and the receiving institution can affect the transfer of the credits earned.
8. Institutions accept credits from courses and programs like those they offer. They look for similarity in course goals, content, and level of difficulty.
9. Baccalaureate degree programs usually count credits in four categories: education, major/minor courses, prerequisites, and electives. The key question is, "Will your credits fulfill requirements of the degree or program you choose?"
10. If a student changes career goals or majors, he/she might not be able to complete all degree requirements within the usual number of graduation credits.

Your Rights as a Transfer Student

The following are rights of a transfer student:

1. To receive a clear, understandable statement of an institution's transfer policy.
2. To receive a fair credit review and an explanation of why credits were or were not accepted.
3. To appeal a transfer decision. (See Records and Registration for a petition form.)
4. To receive a review of eligibility for financial aid or scholarships and transfer of present financial aid records.

Transfer Appeals Process

Usual appeal process steps are:

1. Student completes the General Petition Form indicating they would like to appeal a transfer evaluation decision, and the

rationale for their request. Supplemental information, i.e. a course outline, course description or reading list, can help in this process.

2. The CLC Registrar will review the General Petition and notify the student of the outcome of the appeal in writing.
3. If the student is not satisfied with the decision of the college, they have the right to appeal to the Vice President of Academic and Student Affairs. (Please contact the Transfer Specialist for the appropriate paperwork.)
4. If the student is not satisfied with the decision of the Vice President of Academic and Student Affairs, they have the right to appeal to the Senior Vice Chancellor of Academic and Student Affairs at MnSCU using the System Appeal Form. This decision is final. (Please contact the Transfer Specialist for assistance with completing the appeal.)

For more information, please refer to Procedure 3.21.1-Part 7, Subpart B-System level appeal at: <http://www.mnscu.edu/board/procedure/321p1.html>.

Credit for Advanced Placement Testing

Central Lakes College will award credit for Advanced Placement testing provided the student earned a score of 3 or above on the exam. The amount of credit granted will not exceed the credit granted for an equivalent course or course sequence offered by CLC. Approved credits will be transcribed as "Advanced Placement" credits. Students wishing to apply for Advanced Placement credit should request to have test results mailed to Records and Registration.

Credit for CLEP

Credit for both subject and area examinations of CLEP (College Level Examination Program) will be evaluated for credit according to the recommendation of the American Council on Education and according to the policies of Central Lakes College. Students wishing to apply for credit should have results mailed from CLEP directly to the Records and Registration office. Approved credits will be transcribed as "CLEP" credits. Information about CLEP is available in the Counseling Center.

Credit by Evaluation

If a student is confident that he/she has the competencies needed to meet the objectives for a diploma program course, he/she may make a request for Credit by Evaluation by following these steps:

1. Check the list of courses that allows this method. The list is available from the vice president of Academic Affairs office.
2. If the student decides to proceed, he/she should complete the Credit by Evaluation form available from the vice president of Academic Affairs office.
3. After the student completes the form, the VP of Academic Affairs or designee will assign the appropriate instructor to administer the evaluation. The evaluation may be oral, written, demonstration, or a combination of these.
4. The student will go to the cashier to pay the appropriate non-refundable fee. Students are reminded that financial aid does not cover any of the Credit by Evaluation fees.
5. The student will then meet with the assigned instructor to set up the test time and finalize criteria for the evaluation.
6. The examination will be administered to the student.
7. The instructor will return the Credit by Evaluation form to the VP of Academic Affairs who will ensure the credits are appropriately transcribed.
8. Only the grade of "S" will be allowed for Credit by Evaluation courses.

The process allowing Credit by Evaluation must be completed by the end of the drop-add period to allow the student to withdraw from a course without penalty. If the student has not registered for the course and wishes to attempt Credit by Evaluation, the student may complete the process at any time.

A student cannot receive Credit by Evaluation for a course she/he previously registered for and failed.

Credit for Military Experience

An enrolled student may request an evaluation of military experience and education for college credit from an official military transcript, form DD214, or Notice of Basic Eligi-

bility (NOBE). This is evaluated and awarded by the Registrar according to the standards of the American Council on Education (ACE), the American Association of College Registrars and Admissions Officers (AACRAO), and the policies of Central Lakes College. Contact the Records and Registration office for information.

Credit for Tech Prep

Central Lakes College has a number of course equivalency agreements with high schools. These articulation agreements allow students to experience advanced learning that can be used in their college career. Students are subject to the current articulation agreement that is in effect at the time of their enrollment at Central Lakes College. Tech Prep credits are transcribed showing total credits and identified as “Tech Prep” credits. Students who are interested in further information should contact their high school counselor or the Records and Registration office of Central Lakes College.

Veteran Student

Central Lakes College is approved by the Minnesota State Approving Agency for Veterans Educational Benefits. Applications for veteran educational benefits may be obtained by contacting the Veteran Certifying Official at the Records and Registration office of either the Brainerd or Staples campus. Additional information is available by contacting the Veterans Administration, Fort Snelling, St. Paul, Minnesota, 1.800.827.1000, TDD 1.800.829.4833, or by going to the Department of Veteran Affairs web site at: www.va.gov.

Withdrawing from a Course

Students may withdraw online using e-services by selecting the “drop/withdraw” function after selecting the course you wish to withdraw from. When a student withdraws from a course, his/her transcript will show a “W” grade for the course. While withdrawing from a course does not affect a student’s GPA, the student needs to complete 67% of his/her attempted credits to remain in good academic standing at Central Lakes College. The college strongly recommends that before a student withdraws from a course, he/she should first meet with an advisor. No refunds

are given for withdrawing from individual courses.

For Fall and Spring Semester courses which start at the beginning of each semester and meet for the full 16 week term, a student may withdraw online utilizing e-services up to ten (10) business days prior to the start of finals exams. For any courses not meeting for the full 16 week term, a student may withdraw utilizing e-services up to twenty (20) business days following the first class meeting.

For Summer Session courses, students may withdraw from a course up to five days before the end of the session for courses which meet for the full 8 week term.

If a student wishes to withdraw after the deadline, he/she must obtain permission from the instructor and signature of approval on the Withdraw Form.

Withdrawing Totally from College

Students may totally withdraw from Central Lakes College by withdrawing utilizing e-services, or by completing a Total Withdraw form, which is available at the Financial Aid office. The form must be initiated by the student. Students are not allowed to withdraw after the final withdraw date of each semester. Tuition will or will not be refunded according to state or federal policy. All students totally withdrawing from the college will receive “W” grades for registered courses. If a student who receives Federal financial aid officially withdraws from all his/her classes or merely stops attending classes at CLC before 60% of the term is completed, the student will be required to repay a portion of his/her financial aid. The student’s last date of attendance will be determined as follows:

1. If a student completes a Total Withdrawal form before leaving CLC, the college will use the date on the form as the last date of attendance.
2. If a student stops attending classes and does not notify CLC of his/her decision, the student will receive “F” grades for all registered courses and the student’s last date of attendance will be reported by the student’s instructors.

Before making the decision to totally withdraw from college, it is highly recommended that you visit with the Financial Aid office and a counselor. For more information, please see the *Return of Federal Financial Aid* section of this catalog.

Tuition, Fees, and Financial Aid

Tuition, fees and policies are as of the date of publication and subject to change. Please visit our website @ www.clcmn.edu/businessoffice for up-to-date tuition rates, fees and policies. Central Lakes College does not mail tuition statements. The act of registration is considered an acknowledgement on the part of the student that he/she will attend and pay for the registered courses. It is the responsibility of the student to review their account on-line and pay their bill in a timely manner, according to the due dates noted below. For current account information please check online @ www.clcmn.edu. Select e-Services at the top of the screen and log in using your Student Tech ID and PIN.

Tuition Due Dates:

- *Fall, Spring and Summer*—15 business days prior to start of semester

Financial Aid disbursement:

- *Fall and Spring*—12th day of semester
- *Summer*—10th day of term

Central Lakes College utilizes Higher One for student disbursements (financial aid, work-study and tuition/fee refunds). Students have 3 options to get their student refunds and financial aid:

- Through direct deposit to their own bank account.
- A paper check.
- They can establish an account with Higher One.

Tuition payments must be received, in the Business Office, by 4:30 p.m. on the tuition due date. For current student account information please check online @ <http://www.clcmn.edu>. Select e-Services at the top of the screen and log in using your Student Tech ID and PIN.

Tuition Fees & Rates for 2012-2013

Tuition and required fees for the 2012-2013 academic year is \$179.76 per credit. Please check our website at <http://www.clcmn.edu/businessoffice> for up-to-date information on tuition, fees and policies.

Online and hybrid courses are assessed an additional \$30 per credit. Certain lab and technical courses and/or programs may be charged a higher rate of tuition. Additional fees may apply depending on the courses for which a student registers. CLC charges in-state tuition to all students unless another state's reciprocity agreement dictates otherwise.

For information on the following fees and policies please check our website.

- Test Fees
- Payment Plan Fee
- Late Fee
- Dishonored Checks/NSF Fee
- Senior Citizen Costs
- Late Start/Short term Registration and Tuition Due Date
- Management Programs Tuition Due Date

Payment Options

Students have several options for paying their tuition and fees:

1. Payment in Full

Pay online using an e-check, check/debit card, VISA, MasterCard or Discover. Log in using a Student Tech ID and PIN at: <http://www.clcmn.edu>

Click on: Visit the MnSCU e-services site
Log in using your Student Tech ID & PIN

Click on the Following Links

- Bills and Payment

- Make a Payment

Proceed with the instructions to make a payment. The Business Office accepts cash, check, cashier's check, money order, debit card, VISA, & MasterCard.

2. Payment Plans

Nelnet (formerly FACTS) Payment Plan

To help students meet their educational expenses, Central Lakes College is proud to offer Nelnet as a convenient budget plan. This is not a loan program. There is no debt, there are no interest or finance

charges assessed, and there is no credit check.

- a. The cost to budget an interest-free monthly payment plan is a \$25 per semester, nonrefundable enrollment fee.
- b. Tuition and fees may be budgeted in the following ways:
 - i. Automatic Bank Payment (ACH): made from either a checking or savings account. Payments are processed on the 5th of each month and will continue until the balance is paid in full.
 - ii. Credit Card Option – monthly payment is automatically charged to a designated credit card. Payments will be charged on the 5th of each month until the balance is paid in full.
- c. Apply online at www.clcmn.edu/businessoffice and click on “Payment Options”, “Payment Plans”, and then on the e-Cashier logo.

CLC Payment Plan

- b. A minimum payment of \$350 or 15% is required 15 days prior to the start of the semester.
- c. The remaining balance is due at the start of mid-term.
- d. A \$30 fee applies to this option.

3. Deferment

Students may defer payment based on one or more of the following:

- a. Financial Aid
 - i. Fifteen days prior to the start of the semester, the student must have filed for financial aid and have an ISIR on file with the college. An ISIR is a notice, sent to the college, from the Department of Education confirming the FAFSA (Free Application for Student Aid) has been received. This defers payment until the 25th class day of the semester (15th class day for summer).
 - ii. Financial aid file must be complete by 4:30 p.m. on the 25th class day of semester for fall and spring (15th class day for summer). This means an award letter has been received and all required paperwork

has been completed.

- b. Third Party Funding (such as CEP or DRS benefits) – The college is in possession of a funding authorization, in an amount adequate to cover charges, fifteen days prior to the start of the semester.
- c. Scholarships. The college has received scholarship funds on your behalf.
- d. VETS/Military – Individuals receiving military funding are eligible for tuition deferment, provided the College has proper documentation indicating the student will receive funding.

Students Receiving Financial Aid

Note: the fee statement does not list the amount of financial aid a student is eligible to receive. It shows the amount of tuition and fees owed. The financial aid award letter lists the types and amounts of funding a student is eligible to receive based on the number of enrolled credits. The two documents should be compared to determine if the student will personally owe the college for any of the tuition costs. Remember: a separate loan promissory note must be completed in order to borrow a student loan.

Registration Cancellation for Non-Payment

Students, who do not have their accounts paid in full by the tuition due date or have not made payment arrangements, will have the class registrations cancelled for non-payment. A student can prevent class registrations from being cancelled for non-payment by:

- Signing a FACTS payment plan,
- Filing for financial aid,
- Submitting a written third party funding authorization to the college,
- Making a down payment of \$350 or 15% of balance owing on their account.

The registration cancellation for non-payment process will occur:

- 3 weeks prior to the start of the semester,
- On the 5th business day of the semester, after the free add/drop period has ended,
- Periodically throughout the semester to incorporate late start classes.

If a student’s class registration is cancelled for non-payment, prior to end of the free drop/

add period, the student may re-register for classes, depending on class availability and provided appropriate payment arrangements are made. After the 25th business day of the semester, students will not be allowed to re-register.

Note: Students enrolled in internship programs are exempt from registration cancellation. If a student does not intend to participate in their internship, it is the responsibility of the student to notify the college of that decision and drop the course. For information regarding the following policies, please check our website at:

<http://www.clcmn.edu/businessoffice>

- Non-Payment
- Add/Drop/Withdrawal
- Refunds
- Appeals
- Appeals for Tuition and Fees Refund
- Appeals for Registration Cancellation for Non-payment
- Appeal for Tuition Deferment
- Appeals for Minimum Payment

Auditing a Course

Students who register to audit a course for neither credit nor grade will pay the regular tuition rate. Students auditing a course must also meet course prerequisites. Financial assistance does not apply to audited courses.

Confidentiality of Financial Records

The General Education Provision of Act of 1974, as amended by the Family Educational Rights and Privacy Act of 1974, provides for privacy safeguards for students and families by setting up guidelines for the disclosure of education records and personally identifiable information. The law provides that financial assistance records of a student may be inspected by that student only. A student may provide written notice of release of information to other family members if desired.

Financial Assistance

Central Lakes College is dedicated to bringing the highest quality of education within reach of every person who has a desire to pursue a college education. The Financial Aid office at

CLC has developed a comprehensive financial aid program based on federal, state, and institutional resources to help cover the cost of education. CLC annually awards assistance to about 70 percent of its student body. Therefore, no prospective student should hesitate to apply for admission because of financial circumstances. The CLC Financial Aid staff encourages all students to apply for financial aid. For the most current information regarding Financial Aid please visit the CLC Web site at www.clcmn.edu/financialaid.

Eligibility Requirements:

Unless otherwise stated, students receiving financial aid must:

1. Demonstrate financial need, as determined by the results of the Free Application for Federal Student Aid (FAFSA);
2. Have a high school diploma or GED.
3. Be enrolled and attend class as a regular student in a degree program of at least one academic semester in duration that leads to a certificate, degree or other recognized credential and prepares students for gainful employment in a recognized occupation;
4. Maintain federal and state regulations requiring that all persons receiving financial aid meet the college's Standards of Academic Probation and Suspension.
5. Be a U.S. citizen or an eligible non-citizen;
6. Not be in default on any student loan or owe a refund to any student grant program;
7. Be registered for Selective Service (if required).
8. Must attend each class at least once.

How is Eligibility Determined?

Most financial assistance is awarded on the basis of financial need and may include a combination of the various types of aid. Need is defined as the difference between the cost of attending Central Lakes College and the available resources of the student and student's family to meet these costs (determined by the results of the Free Application for Federal Student Aid).

How to Apply for Financial Aid:

The Free Application for Federal Student Aid (FAFSA) is available after January 1 of each

year. (The FAFSA needs to be completed online each year the student is in school.) If you have Internet access, you can file a FAFSA at www.fafsa.gov. A paper FAFSA may be requested by directly contacting the US Department of Education. Please contact the Financial Aid office if you have questions.

Students who have a completed financial aid application on file with the college by June 1 receive priority consideration for campus based aid (FSEOG and student employment). After June 1, applications are reviewed on a first-come, first-serve basis. Separate applications are needed for Post-Secondary Child Care Grant program, Alliss Grant, Start-up Scholarship, Foundation Scholarships, and any student loan.

Types of Financial Assistance

Financial aid comes in three basic categories: Grants and Scholarships, Student Employment and Loans.

1. *Grants and Scholarships*: Are gifts that are not repaid unless you drop, totally withdraw from class, or never attend a class. Types of grants or scholarships include:
 - a. Federal Pell Grant - This is a federal grant awarded to eligible students. Students must demonstrate financial need.
 - b. Federal Supplemental Educational Opportunity Grant (SEOG) - This is a federally funded grant administered by the college. Students must demonstrate high financial need. Awards are limited to funds available.
 - c. Minnesota State Grant - This is for Minnesota residents attending a Minnesota college only based on eligibility.
 - d. Post-Secondary Child Care Grant Program - Income-based grant for students who have children in day care. Awards are limited to funds available.
 - e. Alliss Grant - (Liberal Arts & Science Students) - This grant pays for up to one four-credit class to students entering college after being out of school for seven years. A student may receive it once. Course fees and books are not covered by this grant.
 - f. Start-up Scholarship - (Technical

Education Students) - This grant pays for up to a three-credit class. This is an income-based eligibility. Offered one time only. Must not have attended school within the last five years. Awards are limited to funds available.

- g. CLC Foundation Scholarships - CLC has an extensive scholarship program for a variety of scholarship applicants. A CLC Foundation Scholarship application is required. Certain deadlines apply. Check with the Foundation office, Admissions, Financial Aid or the Counseling/Career Center for more information and application form.
 - h. Outside scholarships - Announced in community newspapers and the campus newspaper. A student may also check in the Foundation office.
2. *Student Employment*: Provides students with opportunities to earn money to help meet educational costs. Students must complete the FAFSA to demonstrate financial need in order to qualify. Student employment is viewed as a regular job with responsibilities and employer expectations. Students receive an hour's pay for an hour's work. Jobs are available both on-campus or at designated off-campus sites. A listing of available jobs can be found on the college's Web site under Financial Aid.
 3. *Student Loans*: Money that is borrowed and must be repaid. All borrowers must complete loan counseling and complete a separate online loan application.
 - a. Federal Direct Student Loan programs (subsidized and unsubsidized) - Low-interest loans obtained from a bank, savings and loan or credit union. Interest will not exceed 8 1/4% with long-term payments beginning six months after enrollment drops below six credits.
 - b. Federal Direct Parent Loan for Undergraduate Students (PLUS) - This loan has a variable interest rate, not to exceed 9%, with payments due within 60 days after the loan is fully disbursed.
 - c. Federal Perkins Loan - A student must show high financial need for this low interest loan at 5%. Recipients are

determined by CLC according to the amount of funds available. Priority is given to students who have their financial aid file completed prior to June 1.

- d. Alternative Loans - These loans should be used as a last resort. Interest rates vary greatly and a creditworthy co-signer is usually required.

Steps for Receiving Student Financial Aid

1. The student must be accepted for admission and enrolled at Central Lakes College.
2. The student must file a Free Application for Federal Student Aid (FAFSA).
3. The U.S. Department of Education processor sends a Student Aid Report (SAR) to the student via email or U.S. mail.
4. The U.S. Department of Education processor automatically sends the college your information when you have entered the appropriate college code on the FAFSA. Central Lakes College code is 002339.
5. Paperwork such as Tax Transcripts (parent and/or student), Institutional Verification Form (IVF), or Social Security card may be required.
6. Students transferring from one college to another in the middle of the academic year must inform both schools of their intent to transfer.
7. Estimated award information will be e-mailed to the student after the financial aid file is completed. This award information will explain your grant, loan and work eligibility. Your financial aid award will be finalized at the time of disbursement.
8. Financial aid awards are based on the number of credits at time of disbursement. Students who add a class after their aid has been disbursed may not be eligible for additional financial aid. Students who withdraw from a class prior to their aid being disbursed do not receive aid for the withdrawn class.
9. If you or your family have unusual circumstances, (such as unusual medical or dental expenses not paid by insurance, loss of income or assets) please contact the Financial Aid office.

Return of Federal Financial Aid

Any student considering totally withdrawing from the college must contact the Financial Aid office before making a decision to totally withdraw. Federal regulations require that students who totally withdraw from all classes on or before 60% of the completed term must repay a portion of their federal financial aid. Withdrawal on or before 60% of the completed term means that a student has not earned all of the financial aid he/she was paid. The amount of "unearned aid" is calculated with the following formula:

$$\frac{\text{Days remaining in term}}{\text{Total days in term}} = \frac{\text{Unearned Federal Aid}}{\text{Aid percentage}}$$

The Unearned Federal Aid percentage identifies the amount of aid a student must repay. If the percentage is less than 40%, no repayment of federal funds is required. The Return of Federal Financial Aid policy applies to the following federal aid programs and funds must be returned in this order: Stafford Loans, Perkins Loans, PLUS loans, Pell Grants, SEOG Grants. Refunds to Minnesota financial aid programs are calculated appropriately using CLC's Refund policy.

Impact of Total Withdrawals before the 60% percentage point of time

Students may receive financial aid either as a credit to an account or as a cash payment. If funds have been credited to the student account and the college has an obligation to return federal funds, the student will owe a balance to the college. When a student owes a balance to the college for unpaid tuition/fees, repayment arrangements must be made within 30 days. If the student fails to make repayment arrangements, the college will turn the balance owed the college to the Minnesota Revenue Recapture Program. Examples of these calculations are available upon request in the CLC Financial Aid office. Refunds to Financial Aid Programs are conducted before the student would receive a withdrawal refund. For students receiving State financial aid funding, Minnesota Higher Education Services Offices policies will apply.

Unofficial Withdrawals

Any student who stops attending but does not

officially withdraw will be considered an unofficial withdrawal. For unofficial withdrawals the last date of attendance is defined as the student's last date of recorded attendance or the midpoint of the semester. Unofficial withdrawals will not receive a refund of tuition or fees. Unofficial withdrawals who receive Federal financial aid will have 50% of the financial aid considered to be "unearned" and the Return of Federal funds policies, as described in the impact of Total Withdrawals section, will apply. Students must attend each class at least once to receive a portion of their financial aid.

Satisfactory Academic Progress

Federal law requires that a recipient of state or federal financial aid make satisfactory academic progress toward a degree, diploma or certificate. All students are required to maintain a 2.0 cumulative grade point average and/or complete a minimum of 67% of cumulative registered credits, and complete their program within 150% of the program length in credits. In addition, the Financial Aid office is required by the U.S. Department of Education to monitor whether or not a student will be able to graduate in a timely fashion.

Based upon U.S. Department of Education regulations, Minnesota State Colleges and Universities (MnSCU) policy states "once the institution determines that it is not possible for a student to raise his/her GPA (2.0) or course completion percentage (67%) to meet the institutions standards before the student would reach the end of the program, the student shall be suspended from financial aid". CLC has a Financial Aid office on each campus. The complete Satisfactory Academic Progress Policy can be found the Academic Policies section. Questions regarding financial aid may be addressed to the campus where the student is taking courses.

Brainerd Campus
800.933.0346 or 218.855.8025

Staples Campus
800.247.6836 or 218.894.5157

Student Services

Your Success is Our Goal

Attending college is a time for developing your own life direction, learning about yourself and your interests and strengths. To this end, Central Lakes College offers counseling, advising, assessment, career planning, and placement services. And because your personal development is as important as your career decisions, Central Lakes College offers activities through organizations and clubs to meet individual needs. At CLC, the staff wishes to help you become a successful student who knows how to analyze, make decisions, solve problems, and relate well with others. The staff is here to help you find and further develop these qualities in yourself.

Career Services

Career Services has a wide range of printed and computerized career materials, surveys, and assessments which can help focus a career search and begin making decisions about college choices and career opportunities. In addition, the Career Services features the Minnesota Career Information System, which is a computerized career information system that supplies up-to-date information on employment trends, working conditions, training required for specific jobs, and current salaries.

The Counseling department offers structured career exploration classes as well as a variety of workshops to assist students in making informed career and educational decisions. Counselors Exploration/Planning courses provide participants with a more comprehensive look at their interests, abilities, personal characteristics, and career options. Counselors are available for individual career counseling appointments.

Academic Advising

CLC's advisors are available to assist students from the time they apply for admission through graduation and beyond. Our advisors are equipped to assist students with questions about admissions, financial aid, transfer, career exploration, registration and more. Advisors are a vital resource for students.

Counseling

Counselors meet with students to discuss areas of concern that may interfere with college success. Counselors refer students to outside resources when needed and provide on-campus support for students receiving off-campus services. Some of the issues that students might address with a counselor include, but are not limited to:

- Transition to College
- Relationship Issues
- Chemical Dependency
- Stress/Anger Management
- Rape or Abuse Issues
- Test Anxiety
- Depression/Suicide
- Grief/Loss Issues

If you are in a crisis and need immediate help, please come to the counseling office and ask to see a counselor right away. If a counselor is unavailable, call for help, 1-800-462-5525 crisis hotline.

Veterans Resource Center

The Veterans Resource Center provides information and support to military veterans, their families and community members. The Center is open daily from 8:00 a.m. to 5:00 p.m. and other times by arrangement.

The goal of the Center is to provide a welcoming environment for all who visit or seek services. The Center has, or can locate information about veterans' services, financial resources, scholarships, veteran and family support activities and other items of interest to veterans, family members or community members. The Center's director also serves as a certifying official for Veterans' benefits.

The Center encourages students or prospective students who are military veterans to contact the Center to arrange for priority registration. To be eligible for priority registration, the veteran must visit with the Veterans' Resource Center Director, develop a written educational plan, research available financial resources and agree to follow-up services if needed.

The Center staff serve as an advocate for veterans as well as a college training and educational resource. Staff from the Center provide information and public speaking about veterans issues for the general public. Everyone is welcome to drop in and visit. For additional information call or e-mail the Center.

Placement Services

Central Lakes College has a solid reputation for career education, which enables its graduates to be highly successful in gaining employment. Although securing employment is the responsibility of each graduate, CLC partners with the Minnesota Workforce Center to provide employment services for students. Employers contact the college with job postings for qualified graduates, and all part-time and full-time employment opportunities are listed on the CLC website at www.clcmn.edu.

ACE and Learning Commons

The Academic Center for Enrichment (ACE) at the Staples campus and the Learning Commons at the Brainerd campus, help prepare students for achievement in college courses. The services coordinated through this area:

1. Computer Assisted Instruction: Interactive computer stations and programs are available to support classroom activities for students from various disciplines.
2. Study Group Facilitation: Study groups for students will be coordinated through the staff in this department.
3. Supplemental Instruction: Academic assistance program which supports classes by providing regularly scheduled, out-of-class, peer-facilitated study sessions.
4. Tutoring Services: Tutoring is done to enhance a student's understanding of academic course content and lab course content. It can be accomplished in a small group, classroom, lab, or individual settings. Professional tutors or peer tutors provide these services. All services are free of charge to CLC students.

Students With Disabilities

Central Lakes College complies with Section 504 of the Rehabilitation Act of 1973; Public Law - The Americans with Disabilities Act of 1990 and Amendments Act of 2008 which

prohibits discrimination in employment, transportation, public educational services, and public facilities on the basis of a person's disability; and the 1993 Minnesota Law entitled Policy for Students With Disabilities (Tunheim Law) that states that no qualified individual shall be excluded from the participation in, be denied the benefit of, or be subject to discrimination within any program or activity. The Section 504 Compliancy Officer shall be responsible for coordinating the Central Lakes College compliance to the regulations with Section 504. The policy for students with disabilities at the Central Lakes College ensures the provision of accommodations to meet the needs of all qualified, enrolled or admitted students with disabilities or disadvantages.

Students with disabilities are those who have one or more of the following documented conditions:

- Vision Disability
- Deaf and Hard of Hearing Disability
- Mobility Disability
- Speech Disability
- Systemic Disability
- Chemical Dependency Disability
- Learning Disability
- Psychiatric Disability
- ABI-Acquired Brain Injury/TBI-Traumatic Brain Injury Disability
- ADHD/ADD - Attention Deficit Disorder Disability
- Developmental Disability - PDD, Autism Spectrum Disorders

Services for students with disabilities:

- Reasonable Accommodations & Assistive Technology
- Support Services
- Advocacy Services

The Disabilities Coordinator is the contact person for students needing services, including assistance in working individually with faculty and administration, intervention procedures and questions about grievance procedures.

Students with disabilities requesting services should:

- Contact the Disabilities Coordinator

- Provide recent (within the past two years) documentation of their disability
- Meet with the CLC Disability Services Director to develop an Accommodation Plan, which will determine need and reasonable services.

The Office of Disabilities Services is housed within the Counseling and Careers Center on the Brainerd Campus in Student Services area on the Staples Campus. The Coordinator of Disability Services is located in these areas to assist students with reasonable accommodations. Students with disabilities should initiate requests for services or accommodations prior to their entering the college by calling 218-855-8175 on the Brainerd Campus and 218-894-5182 on the Staples Campus.

Student Support Services

The Student Support Services program is located on the Brainerd campus. The mission of Student Support Services is to increase the retention, graduation, and transfer rates of Central Lakes College students by offering academic and personal support in a variety of ways. The Student Support Services program serves 160 students each year. Federal regulations require that the participants must qualify as at least one of the following:

- First generation college student (neither parent has completed a bachelor's degree)
- Low to moderate income student (according to the U.S. Government)
- Student with a documented disability.

A student must be enrolled in Central Lakes College (Brainerd or Staples campus), taking six or more credits and be a U.S. citizen. During the academic year, students receive individual and group advising to foster positive study habits and academic success. Students can take advantage of a comfortable learning environment, leadership opportunities, cultural excursions, and academic workshops. This Student Support Services is a federally funded program by the U.S. Department of Education.

Upward Bound

Upward Bound is a college access program federally funded by the U.S. Department of Education. Upward Bound provides funda-

mental support to participants in their preparation for college entrance. The program provides opportunities for participants to succeed in pre-college performance and ultimately in higher education pursuits. Upward Bound serves high school students from low income families and high school students from families in which neither parent holds a bachelor's degree. The goal of Upward Bound is to increase the rates at which participants enroll in and graduate from institutions of post-secondary education. Upward Bound is located on both the Brainerd and Staples campuses.

All Upward Bound projects provide instruction in math, laboratory science, composition, literature, and foreign language. Other services include:

- Instruction in reading writing, study skills, and other subjects necessary for success in education beyond high school.
- Academic, financial, or personal advisement.
- Exposure to academic programs and cultural events.
- Tutorial Services.

Libraries

The libraries are the official sites to receive your photo identification card, which is needed to check out materials, access databases from off-campus, and allow access to the campus labs and activities. With your identification card you are able to access the library catalog and databases from any computer world-wide, 24/7.

The Jon Hassler Library (Brainerd campus - east wing) The library provides for academic needs beyond the classroom with an electronic database catalog and resource system. In addition to the traditional library services, there are a number of online databases available. The book and media collection is in excess of 40,000 volumes. With more than 4,000 E-books through the use of the online catalog, a patron may also access more than 2.5 million titles from an expanded academic library consortium. Libraries throughout the world can be accessed via the Internet connections. A significant database, Ethnic News Watch, is a full-text collection of more than 130 ethnic publications from across the United States,

both in English and Spanish. Current topics are also accessible through a vertical clip file collection.

EbscoHOST database provides access to more than 4,500 periodicals, of which 3,500 are peer reviewed; and ProQuest provides access to more than 70 regional newspapers, plus New York Times, Wall Street Journal and USA Today. Many of the publications are provided in full-text format. Through the use of inter-library loan service, any number of books and periodicals can be obtained for patrons.

The Heritage Center houses a special government collection and the Gordon Rosenmeier Center for State and Local Government. Related historical artifacts include Senator Rosenmeier's desk from the capitol, Henry Sibley's (first governor of Minnesota) roll-top desk; and a significant collection of Works Progress Administration (WPA) art.

There are more than 3,000 Native American titles held in the Pete Humphrey Center for American Indian Studies in the Skone Family Conservatory, a part of the library diversity collection. The Conservatory also houses more than 50 native artifacts, available for study in connection with the literature.

The Media Center within the library can accommodate nearly 70 students at any given time for classroom software applications, word processing, Internet access and e-mail. Patrons need to have set up a user identification account through registration.

Staples Campus: Library & Computer Commons

While the physical collection of books and periodicals is smaller than the Brainerd campus collection, all of the same resources are available in the library. Daily courier service between campuses allows for efficient access to all materials. Special collections, which match particular trade and industry programs on the campus, are held in only this library. Leisure reading materials and computer access are provided in the West Campus commons.

Bookstore

Store Hours

Brainerd Campus: Mon-Fri 8 a.m.- 4:30 p.m.

Staples Campus: Mon-Fri 8 a.m.- 1 p.m.

Products:

- Textbooks – new and used for purchase or rental
- School and office supplies
- Art supplies
- Educationally priced computer software
- CLC apparel and gifts
- Postage stamps
- Discount movie tickets
- Greeting cards
- Snacks

Available Services:

- Visa, Master Card and personal checks accepted
- Free gift wrapping with purchase
- Gift Cards
- Check cashing (up to \$10), no two-party checks accepted
- Copies
- Fax service
- Laminating (Brainerd)

Web Orders

Required books for classes can be viewed and purchased from our web site, www.clcbookstore.com two weeks prior to the start of each term.

Critical Information When Purchasing Supplies and Textbooks

Please bring your schedule to the bookstore when purchasing books. The bookstore shelves are arranged alphabetically by department with the books for each course located above the shelf tag. Match the information on the shelf tags to your schedule. It is important to verify that you are choosing the books for the correct section of your course. The bookstore staff will help you locate your books and supplies whenever possible. A booklist for the semester is available on our website @ www.clcbookstore.com.

Textbook Buyback

CLC bookstores offer textbook buyback throughout the year. A current student I.D. is required to complete the transaction. No

receipt is needed for buyback and the bookstores pay in cash. Books are being purchased for the campus bookstores and for a wholesale book company. The bookstores' greatest need for books is at the end of the semester during the week of finals. Watch for announcements of the dates and times of buyback. Study guides, lab manuals and workbooks are bought under limited conditions. Books bundled with multiple components such as CD's, diskettes, supplemental pamphlets, etc. must have all components to be bought back.

Returns and Refunds

Save your receipt! All returns require a cash register receipt. Textbook returns can be made within the first 5 days of the semester for a full refund. Courses with a start date beginning later in the semester have a 48-hour return period from the class start date. Books purchased in shrink-wrap may be returned at a used price if opened. Unopened software may be returned within 24 hours of date of purchase.

Financial Aid Payment Options

Important! Charging at the bookstore begins two weeks prior to the start of the semester and runs through the seventh day of the semester for financial aid. A picture ID is required when charging books. Students with a completed financial aid file have the opportunity to charge textbooks and supplies toward their Pell, MN State Grant, SEOG Grant, Scholarships and/or loans. Students may charge against the excess of their financial aid funds over tuition and fees.

Third party funded students (Rural MN CEP, DVR, VA, TAA, Alliss, etc.) are allowed to charge if they have a written funding authorization on file with the business office. Post Secondary Enrollment Option (PSEO) students are allowed to charge required books and a reasonable amount of required supplies that will be used up in their courses. Books charged by PSEO students are the property of Central Lakes College. Books must be returned to the bookstore at the end of the semester. Books required for developmental course are not covered by PSEO.

Foodservice

Brainerd Campus

Campus Dining Services provides all campus foodservice needs, from the daily operation of the café to catering meetings, pizza parties and any other special functions where foodservice is requested. Your café will be open from 7:30 a.m. – 3:00 p.m. Monday through Thursday and 7:30 a.m. – 2:00 p.m. Friday. The café is closed Saturday and Sunday.

Staples Campus

Lakewood Health System provides all campus foodservice needs, from the daily operation of the cafeteria to catering meetings, pizza parties and any other special functions where foodservice is requested. Your cafeteria will be open from 7:30 a.m. – 1:00 p.m. Monday through Friday. The cafeteria is closed Saturday and Sunday.

Telephone

Office telephones are for official use only. There are public telephones located on campus for student use. Students may not receive phone calls at the college. In the event of an emergency, a student will be contacted in class to return a phone call. The caller will be asked the nature of the emergency in order for Central Lakes College to determine if the call warrants a student being removed from class.

Parking

Convenient student parking is available for all students on all campuses of Central Lakes College. You are subject to a CLC parking citation for the following reasons:

- Parking in a loading zone
- Blocking driveways
- Parking on grass
- Parking on perimeter
- Parking between 11 p.m. and 6 a.m. without a permit
- No permit displayed
- Improper permits
- Improper position
- Parking in restricted zones (i.e. yellow curb, visitor parking, no parking zones, fire lanes)

If you receive a CLC parking citation and wish to appeal, obtain an Appeal Form from www.clcmn.edu/general/security.html and sub-

mit it within 5 days of receipt of the citation. Appeals received after the 5th business day will NOT be considered.

Business and Industry Center parking is restricted to Business and Industry Center clients only. CLC parking lots are patrolled by local police and Campus Security.

Security Escort Service to the parking lots, is available during business hours on the Brainerd Campus by contacting the security department at 218.828.6050, or by pressing the red button on the emergency call boxes by the main exits or by contacting the Information Center (Brainerd: 218.855.8000, Staples: 218.894.5100). Contact maintenance personnel at Staples Campus.

Handicapped Parking

Parking for students with disabilities is provided in designated areas. Students and others parking in these areas must display a current State Handicapped Parking Permit on their vehicle.

CLC Permit Parking

Parking is provided for students with temporary disabilities in designated “permit parking” areas. Students must display a current CLC handicapped parking permit. Permits expire at the end of each semester and are only available through Disability Services (Brainerd: 218.855.8218, Staples: 218.894.5182).

Overnight/Extended Parking

Students needing to park overnight or over an extended time period must obtain a permit through the Information Center at the CLC campus where the parking is being requested; and display the permit on the vehicle’s dashboard, and park in the posted designated parking area.

Housing

For information on housing contact the Student Life Office or check the student life website: www.clcmn.edu/studentlife

Child Care

The Early Care and Education Center provides full and part-time childcare for children ages six weeks until their first day of kindergarten,

for the children of CLC students and staff, as well as Brainerd School District employees' children. A partnership between the Brainerd School District (ISD #181) and Central Lakes College provides not only child care but also learning opportunities for those going into the childcare field. The Center employs full-time, high quality staff to provide a consistent, non-disruptive and safe educational opportunity for children. The Center is open from 7:00 a.m. – 5:30 p.m. every Monday through Friday during the academic year, with the possibility of summer childcare.

Clubs and Organizations

As a student, it is important to study and attend all of your classes regularly. It is also important to get involved and become a part of campus life. At Central Lakes College you will have the opportunity to participate in a variety of clubs and organizations. You will have the opportunity to make friends and engage in new experiences. Each year clubs are formed based upon the interests of the students.

Brainerd Clubs/Organizations:

- Spanish Club
- Phi Theta Kappa
- Psychology Club
- Sigma Delta Law Enforcement
- Rainbow Coalition
- Natural Resources Club
- CLC Signers (PAH) Club
- International Club
- Horticulture Club
- Dental Assistants Club
- Accounting Club
- Art Club
- Veterans Club
- Welding Club
- RN Nursing Club
- CLC Green Club
- PN Nursing Club
- CLC Dance Club
- Multicultural Club

Staples Clubs/Organizations:

- Photo (CIA) Club
- Diesel Club
- Heavy Equipment Club
- The Artery (Commercial Arts) Club
- Farm Business Management Club

- Robotics Club
- Staples PN Club
- Staples RN Club

Student Senate

In accordance with MnSCU Policy 2.1 Campus Student Associations, Central Lakes College recognizes the CLC Student Senate at each campus as the official body for student representation on campus. The purpose of the Student Senate is to work to improve the quality of education and student life.

1. The Student Senate (s) shall develop a constitution that defines the selection of student representatives and a ratification process for student government.
2. The Student Senate(s) shall have the exclusive right to recommend the chartering of clubs and organizations for approval by the college president.
3. The Student Senate shall consider not only campus issues, but state and national issues and/or legislative actions.

Student Life

Student Life Activities

Central Lakes College students find a fulfilling campus experience through activities that promote personal development. Opportunities for rewarding interaction are provided throughout each academic year. Students enjoy the cultural and social experiences that foster positive leisure habits. Many activities are planned and implemented by students.

These include cultural diversity celebrations, Homecoming, Snow Daze, Beat the Heat Week, intramurals, and Awards Day. Organized activities at CLC allow students to demonstrate talents, teamwork, and leadership skills. Activities include athletics, drama, music, visual art, print media, and student government. Some are academic- or career program-related; others are purely social opportunities. The Student Activities Coordinator and Student Senate have information about college clubs, campus organizations, community volunteer activities, and quality non-academic experiences.

Academic-Related Activities

These activities provide opportunities that expand the academic experience beyond the classroom. Academic-related activities include clubs and organizations, Phi Theta Kappa honor society, field trips, forums and conferences, community projects, other class projects, exhibits, and displays. "Diverse Needs" are those services made available to assist students with various personal needs. Although not considered part of general student services, these resources involve child care, support groups for special needs students, commuter services, and residential programs. Upcoming Student Life Activity programs are announced weekly.

Intercollegiate Athletics

The Central Lakes College Raiders provide varsity teams in football, volleyball, men's and women's basketball, baseball, fast-pitch softball, and men's and women's golf. While practices are conducted on the Brainerd campus, students from both campuses are encouraged to participate in programs in which they are interested. CLC is dedicated to providing an exceptional experience to its student athletes.

CLC student athletes are encouraged to reach their potential through demanding daily practices. Those who are willing to dedicate their time and efforts to a competitive college athletic program are invited to participate in Raider athletics. Raider athletics have a proud tradition of fielding successful teams that have brought respect and a healthy reputation for sportsmanship to the region. Central Lakes College is a member of the Minnesota College Athletic Conference (MCAC) and the National Junior College Athletic Association (NJCAA). All teams can qualify to compete for a state, region, and national championship.

Intramurals

The intramural sports program at Central Lakes College offers students a variety of organized activities ranging from competitive and non-competitive team and individual sports, both co-ed and men's and women's (including volleyball, flag football, basketball, softball, golf, and bowling), to group and individual fitness. In addition, non-organized recreational activities such as weight lifting

are provided. Other activities may be offered, and students are encouraged to suggest new activities.

Theatre

CLC Theatre serves as a vital, cultural outlet for the campus community and the entire lakes area. The department stages several productions each academic year. Students can earn an A.A. degree with an emphasis in performance. No prior experience is necessary for participation in the production program. Through active participation in the program, students can participate in the Kennedy Center/American College Theatre Festival. Act IV, a student theatre club, holds annual events. Theatre for a Diverse Population is a nationally recognized part of the department. Productions are presented in the John Chalberg Theatre, a 284-seat proscenium theatre, and the Bob Dryden Theatre, a flexible, black box space with seating for up to 200. CLC Theatre boasts modern lighting and sound equipment, a well-equipped scene shop, and computerized box office system.

Music

The Music Department has more than 150 community and student musicians participating each semester in choir, community band, jazz band, the brass ensemble, and private lessons. Concerts and recitals are scheduled for public audiences throughout the year. Nationally renowned guest artists, such as singing actors William Warfield and Linda Eder, have participated within the music program. The music program is recognized for its high professional standards, both in teaching and performing. A wide variety of academic courses are provided by the Music Department.

EMPLOYEE DIRECTORY

Faculty

A

Mark Ambroz, Videography
B.A. University of Minnesota

Andrew Anderson, Heavy Equipment
A.A.S. Central Lakes College

Steve Anderson, Music
B.S. North Dakota State University
M.A. St. Cloud State University

Julie Austin, English
A.A. Vermilion Community College
B.S. Bemidji State University
M.A. Bemidji State University

Keith Austin,
Marine & Small Engine Technology
Diploma, Brainerd Technical College

B

Jan Bedard,
English, Study Skills, Reading
B.A. Franklin College of Indiana
M. Ed. University of Missouri, St. Louis

Daniel Bjerga, Mathematics
B.A.S. University of Minnesota, Duluth
M.S. St. Cloud State University

Kathryn Black Lance, Speech
B.A. Northwestern College
M.A. Bethel University

Deana Bobzien, Mathematics
B.S. Western Illinois University
M.A. University of Illinois at
Springfield

Robert Brekken, History
B.A. Concordia College
M.A. University of Minnesota,
Twin Cities

Susan Bremer,
Medical Secretarial Occupations
B.S. Bemidji State University
M.S. The College of Saint Scholastica

C

Gary Carson, Natural Resources
Diploma, Globe Business College
A.A.S. Brainerd Technical College
B.S. St. Cloud State University
M.S. Bemidji State University

Nathan Converse,
Farm Business Management

B.S. University of Minnesota, St. Paul
M.A. University of Phoenix

Salle' Crutiare, Accounting
B.S. St. Cloud State University
M.B.A. St. Cloud State University

D

Leon Dahlvang,
Media Communications
Diploma, Central Lakes College

Gae Davis, Law Enforcement
A.A. Brainerd Community College
B.A. Concordia of St Paul
M.S. St. Cloud State University

Ryan Deblock, English
B.A. University of Minnesota, Duluth
M.A. University of Minnesota, Duluth

Mary DeVahl, Counselor
B.S. Mankato State University
M.S. St. Cloud State University

Jeff Dirks, Horticulture
Diploma, American Floral Arts School,
Chicago
B.S. University of MN
M.S. University of MN

E

Bruce Eastman, English
B.A. NE Missouri State University
M.A. NE Truman State University
M.F.A. University of Arkansas

Dennis Eastman, Women's Basketball
Coach, Physical Education
B.S. Moorhead State University
B.S. Mayville State University
M.S.S. U.S. Sports Academy

Kristina Ehnert, Accounting
B.A. Concordia College

F

William "Bill" Faber,
Natural Resources
A.A. St. Cloud State University
B.S. University of Minnesota
M.S. The Swedish University of
Agricultural Sciences
Ph.D. The Swedish University of
Agricultural Sciences

Anne Nelson Fisher, Mathematics
B.A. The College of St Benedict
M.S. The University of Iowa

Leane Perius Flynn, English
B.A. University of Minnesota, Morris
M.A., Northeastern University, Boston

Matthew Fort, English
A.A. Central Lakes College
B.A. St. John's University
M.A. St. Cloud State University

Scott Foster, Sociology
A.A. Central Lakes College
B.A. Bemidji State University
M.A. University of North Dakota

Kari (Carol) Frisch, Speech
A.A. Brainerd Community College
B.A. St. Cloud State University
M.A. University of ND

Bruce Fuhrman,
Photo Imaging Technology
Diploma, Staples Technical College
B.S. Moorhead State University
M.S. Moorhead State University

G

Rebekah Gammon, Nursing
B.S. Chamberlain College of Nursing
M.S. Walden University

Darci Goeden, Nursing
B.S. University of ND
M.S. University of Phoenix

Don Goode, Mathematics
B.S. Drake University
M.S. Bemidji State University

Daniel Gunderson, Diesel Mechanics
B.S. Moorhead State University
Diploma, Moorhead A.V.T.I.

H

Jessica Herron, Nursing
A.S. Central Lakes College
B.A. College of Saint Scholastica

Yoshinao Hirai, Physics
B.S. University of Wisconsin-Madison
Ph.D. University of Wisconsin-
Madison

Brandon "Brandy" Hoffmann, English
B.A. University of Minnesota Morris
M.A. University of Minnesota Duluth

Paul Hofmann,
Small Engine Mechanic
Diploma, Central Lakes College
B.S. Bemidji State University

EMPLOYEE DIRECTORY

Wendy Holder, Nursing
A.S. Central Lakes College
B.S. Bemidji State University

Michael Hopps, Geography
B.A. Hamline University
M.A. Syracuse University

Tanya Hoting Mrazek, Sign Language
A.A. Brainerd Community College
A.A. St. Paul Technical College
B.A. College of St. Benedict
M.Ed. University of Minnesota

Darlene Houle, Computer Careers
A.A. Brainerd Community College
B.A. Concordia College

Ron Houle, Computer Careers
A.A. Brainerd Community College
B.A. College of St. Scholastica
M.A. College of St. Scholastica

J

Sarah Jennissen, Nursing
A.D.N. Anoka Ramsey
Community College
B.S.N. Bethel University

Raymond Johnson, Auto Mechanics
Diploma, Brainerd Technical College

K

Richard Kangas, Counselor
Degree, Eveleth A.V.T.I.
A.A. Rainy River Community College
B.S. Bemidji State University
M.A. St. Mary's University of MN

Sandra Kaplan, Biology
B.S. Bemidji State University
M.S. Northern Arizona University

Tara Karels, Nursing
A.S. Brainerd Community College
B.S. College of St. Scholastica

Suzanne Karsnia, Counselor
B.A.S. University of Minnesota Duluth
M.A. University of Minnesota Duluth

Larry Kellerman, Librarian
B.A. University of Minnesota
M.S. St. Cloud State University

Jeff Klehr, Heavy Equipment
Diploma, Dakota County
Technical College

Thurman Knight, Speech
B.A. University of Minnesota
M.A. University of Minnesota

David Kobilka, Earth Science
A.A. Brainerd Community College
B.S. Bemidji State University
M.S. Texas A & M University

Martha Kuehn, Psychology
B.A. Hamline University
M.S. St. Cloud State University

Michael Kuklok, Heavy Equipment

Janet Kurtz, Spanish
B.A. Hamline University
M.A. Hamline University

L

Dennis Lamberson, Theatre
B.A. California Lutheran College
M.A. California State University-Chico

Lori Beth Larsen, English
B.A. University of Hawaii at Manoa
M.A. St. Cloud State University

Jackie Lindquist, Math
B.S. University of Minnesota
M.S. Bemidji State University

Shirley Lofquist, Nursing
B.S. University of Minnesota

Chuck Lund, Computer Technology
A.A. Central Lakes College
B.A. St. Olaf College

M

John Maleski, Heavy Equipment
Diploma, Staples Technical College

Adam Marcotte, English
B.A. Ithaca College
M.A. State University of
New York at Cortland

Elizabeth Mayers, Biology
B.S. Villanova University
M.S. St. Joseph's University

Debra McCarthy, Business
B.S. Bemidji State University
M.A. College of St. Scholastica

Dawn Michel, Medical Assistant
Diploma, Willmar Technical School
A.A. Degree, Central Lakes College
B.S., Bemidji State University

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B.S. University of Minnesota-Duluth
M.S. University of Minnesota-Duluth

Julie Morgan, Dental Assisting
Diploma, Moorhead
Technical College

O

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B.S. College of St. Benedict
M.S. Minnesota State University,
Moorhead

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A.A. Central Lakes College
A.S. Central Lakes College
B.S. Bemidji State University
M.S. University of Phoenix

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Farm Business Management
B.S. University of MN, Twin Cities
M. Ed. University of MN, Twin Cities

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B.S. & M.S. Minnesota State University
Mankato

Mamfe Osafo, Mathematics
B.S. University of Cape Coast, Ghana
M.S. Minnesota State University,
Mankato

P

Gary Payne, Sociology
B.A. University of Kansas
M.A. St. Mary's College
Ph.D. South Dakota State University

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Volleyball Coach, Phy Ed
B.A. College of William and Mary
M.S. St. Cloud State University

Nathan Peterson, Robotics
A.S. Brainerd Community College

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B.S. St. Cloud State University
M.A. University of Northern Colorado

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M.Ed. University of Minnesota

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B.A. Macalester College
M.S. University of Oregon
Mark Platta, Biology
B.S. & A.S. University of Wisconsin -
Stevens Point
M.A. St. Cloud State University

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B.S./B.A. University of North Dakota
M.S. Bemidji State University

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A.A. Lakewood Community College
B.S. Minnesota State University,
Mankato
M.S. Minnesota State University,
Mankato

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Mathematics, Earth Science
B.S. University of Michigan
M.S. University of Michigan

R

Ronn Redemske, Machine Trades
Diploma, Staples Technical College

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A.A. North Hennepin
Community College
B.A. College of St. Thomas

Michael Reeser, Welding
B.S. Auburn University

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B.A. St. Olaf College
M.S. Ohio State University

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M.S. University of Minnesota Duluth

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Golf, Phy Ed & Health
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Child Development
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M.S. Mankato State University

S

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Music
B.S. St. Cloud State University
M.S. St. Cloud State University

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A.A. St. Cloud Technical College

Michael Sams, Heavy Equipment
Certificate, Staples AVTI

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Diploma, St. Paul Technical College

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B.S. South Dakota State University
M.S. Kaplan University

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M.S. University of Minnesota

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B.S., St. Cloud State University
M.A. St. Cloud State University

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M.A. Northern Illinois University
M.F.A. Northern Illinois University

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M.A. St. Cloud State University
M.F.A. University of Minnesota

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U

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V

Gordon Vierkant, Heavy Equipment
Staples Vocational
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M.S. Bemidji State University

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M.S. Purdue University

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Y

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Diploma, Central Lakes College

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Wayne Altrichter, Maintenance
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L

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O

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Crystal Olson, Financial Aid
Rick Otteson, Physical Plant Director

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Displaced Homemaker Program
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Development Center

R

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John Reese, Maintenance

Susan Roering, TRIO/Upward Bound
Gary Rohr, Maintenance
Pamela Roncalli, Business Office

S

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Nancy Schmidt, Heavy Equipment
Patricia Sloan,
Occupational Skills Program
Alexandra "Sasha" Smith, Marketing
Diane Smith, Business Office
Christopher Staples,
Technology Services
Jan Sterner,
Admissions/Student Services
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Myron Stevens, Maintenance
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Betty Street, Library

T

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Eloise Thorson, Customized Training
Elizabeth Tinsley,
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Diane Wuollet,
ACE College Lab Assistant
Bianca Wyffels, Business Office

Z

Joshua Zaborowski,
TRIO Upward Bound

EMPLOYEE DIRECTORY

Administration

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B.A. College of Saint Scholastica
M.A. University of MN, Duluth

Michael Amick, Dean of Academic & Technology Services
B.S. MN State University Moorhead
M.A. MN State University Moorhead

B

Rebecca Best, Dean of Workforce, Economic, and Regional Development
B.A. St. Cloud State University
M.A. College of St. Scholastica

C

Kari Christiansen, Vice President of Administrative Services
B.S. Valparaiso University
M.S. College of St. Scholastica

F

Connie Frisch, Dean of Nursing
B.A. College of St. Scholastica

L

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B.S. Iowa State University
B.A. MN State University, Mankato
M.S. MN State University, Mankato
Ph.D. University of MN

M

Kelly McCalla, Interim Vice President of Academic Affairs
A.A. Brainerd Community College
M.A./B.A. Bemidji State University

P

Nancy Paulson, Director of Human Resources

S

Mary Sam, Director of Intercultural Services, Diversity & Tribal Relations
B.S. Bemidji State University
M.S. University of MN

T

Pam Thomsen, Director of Resource Development & Foundation

A.A. Brainerd Community College
B.S. St. Cloud State University
C.P.A.

W

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M.B.A. St. Cloud State University

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Admissions

Contact us for
Scheduling campus tours
Enrollment information
Application packets
Academic catalogs

E-mail us

admissions@clcmn.edu

To apply online or to check out our
admission services go to:

www.clcmn.edu/admissions

Brainerd Campus

501 West College Drive

Brainerd, MN 56401

800.933.0346 | 218.855.8037

Staples Campus

1830 Airport Road

Staples, MN 56479

800.247.6836 | 218.894.5175

Staples West Campus

10004 255th Avenue

Staples, MN 56479

218.894.5136



Pictured from top to bottom:
Brainerd Campus
Staples West Campus
Staples Main Campus

Academic Calendar 2012-2013

Fall Semester 2012

August 27	First Day of Classes
September 3.	Labor Day Holiday
September 26	Student Success Day
October 18-19	MEA Break
October 22.	2nd Half of Semester begins
November 12	Veterans Day Holiday
November 22-23	Thanksgiving Break
December 14.	Last Day of Classes
December 17-20.	Fall Semester Finals
December 21 - January 8.	Semester Break

Spring Semester 2013

January 14	First Day of Classes
January 21	Martin Luther King Jr. Holiday
February 18-19.	Presidents' Day Break
March 8 -15.	Spring Break
March 18	Second Half of Semester begins
March 20.	Assessment Day
May 13	Last Day of Classes
May 14-17.	Spring Semester Finals
May 15	Staples Graduation
May 16	Brainerd Graduation

Summer Session 2013

June 3	First Day of Classes
July 4.	Independence Day Holiday
July 26	Last Day of Classes

Telephone Directory

Brainerd Campus 1.800.933.0346

General Information	855.8000
Administration	855.8051
Bookstore	855.8248
Business & Industry Center	855.8142
Business Office	855.8030
Cashier	855-8247
Computer Commons Help Desk.	855-8200
Library	855-8180
Student Service Center.	855.8031
Admissions, Advising, Counseling, Financial Aid, Registration	

Staples Campus 1.800.247.6836

General Information	894.5100
Administration	894.5128
Admissions	894.5175
Agricultural & Energy Center	894.5161
Bookstore	894.5118
Business Office	855.8030
Cashier	894.5109
Financial Aid Office	894.5157
Library	894.5134
West Campus	894.5136

For up-to-date information
check CLC Website.

www.clcmn.edu 



You can also view the college
calendar on your smart device!

Scan the QR code on the left or
type m.clcmn.edu in your mobile
browser to access the calendar from
CLC's mobile website.