



General Catalog 2005-2007

2101 Trinity Road
Duluth, MN 55811
www.lsc.edu

An equal opportunity educator/employer and member of
the Minnesota State Colleges & Universities System



Table of Contents



Greetings from LSC President.....	4	Computer Technology	40
LSC Mission Statement.....	5	Information Systems Programmer	38
General Information	6	IT Specialist: Network Administration	
About LSC.....	6	Computer Networking	39
Accreditation	6	Microcomputer Office User Specialist.....	41
A Great Place to Learn	6	Web Developer	41
Staff and Faculty	6	Health Care Careers	42
Affirmative Action/Equal Opportunity.....	6	Background Study for Students	42
LSC Students	7	Dental Hygiene.....	42
Student Life	7	Health Unit Coordinator.....	43
Student Life Center.....	7	Massage Therapist	43
Student Activities	7	Medical Assisting	44
All Campus Student Organizations.....	7	Medical Laboratory Technician	44
Program Related Organizations.....	7	Nursing	45
LSC Foundation.....	8	Practical Nursing	46
Services to Students.....	8	Phlebotomy.....	46
Financial Aid	12	Physical Therapist Assistant	47
Tuition and Fees.....	13	Radiologic Technology.....	48
General Education Mission Statement.....	15	Respiratory Care Practitioner.....	49
LSC College-wide Outcomes	15	Surgical Technology.....	49
Philosophy of Assessment	15	Public Safety Careers	50
Academic Information.....	17	Foundations of Corrections	50
Programs for Transfer	18	Fire Technology & Administration	51
Associate in Arts Degree	18	Paramedic	52
Minnesota Transfer Curriculum.....	18	Trade & Industry	52
Associate in Science Degree	18	Computer Service Technician	52
Associate in Arts Degree Requirements	19	Architectural Technology	52
Technical Programs	24	Basic Electronics Certificate	53
Business Careers.....	24	Broadcasting	53
Accountant.....	24	Building Construction Technology	54
Administrative Office Specialist	24	Civil Engineering Technology	55
Administrative Support-Legal Secretary	25	Commercial & Residential Wiring	56
Aviation Management.....	25	Computer Aided Design Engineering Technology	58
Business Administration.....	26	Geopak	59
Business Information Specialist	26	Microstation (CAD)	59
Health Insurance & Billing	27	Electronic Engineering Technology.....	59
Human Resources Management.....	27	Electronic Technology	61
Information Processing Assistant.....	28	Power Limited.....	62
Legal Administrative Assistant	28	Machine Technology Careers	62
Leadership.....	28	CNC Machine Programmer.....	62
Legal Secretary	29	Machine Tool Operator	63
Medical Administrative Secretary	29	Moldmaker/Toolmaker	64
Medical Receptionist	30	Transportation Careers	64
Medical Secretary	30	Auto Body Technology.....	64
Medical Transcription	31	Auto Service Technology.....	65
Office Assistant	31	Brake & Suspension Technician	66
Paralegal Studies.....	32	Driveability Technician	66
Performance Improvement.....	34	Professional Pilot	67
Professional Bookkeeper.....	34	Truck Driving	67
Quality	34	Wilderness Pilot	67
Sales & Marketing	35	Course Descriptions	69
Supervisory Management.....	36	Selected College Policies.....	149
Computer Careers	37	Faculty Credentials	190
Computer Careers Program Prerequisites	37	Administration	196
Business & Technology	37	MnSCU Board of Trustees.....	196
CISCO Certified Network Associate	37	Index	197
Computer Literacy, PC Technician	38		

President's Welcome



Greetings and welcome to Lake Superior College! We are a dynamic, comprehensive college that emphasizes student learning and student service. We take pride in the fact that our students feel recognized as individuals by our staff and faculty, and I trust that you will experience, firsthand, that personal connection.

LSC offers extensive pre-baccalaureate majors for students interested in transferring to senior educational institutions as well as more than 90 certificate, diploma, and degree programs in career/technical fields. Our Center for Workforce and Community Development collaborates extensively with area businesses to design specialized educational opportunities, including professional training, for adult learners.

LSC offers more than 130 online courses through our popular Virtual Campus. We are one of the largest public providers of online education in the state. These classes include fully transferable Minnesota Transfer Curriculum courses, electives, technical program courses, and developmental education courses. Most of our students will opt for at least one online course throughout their educational careers, taking full advantage of the scheduling flexibility and a non-traditional learning approach.

You will find the faculty and staff at Lake Superior College to be friendly, sincere, and helpful. We are student-centered, creative, and dedicated to student learning. Our main goal is to help students succeed. You have only to call, email, or visit us to begin to experience the spirit of Lake Superior College.

We work to constantly improve our existing programs and services and to look for new opportunities, new approaches, and new services as we prepare to meet the educational challenges of the 21st century.

Best wishes to you as you explore the many opportunities Lake Superior College has to offer you.

*Dr. Kathleen Nelson
President*

An Equal Opportunity Educator/Employer

Lake Superior College is an equal opportunity educator. All persons are eligible for enrollment regardless of race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission.

Individuals with disabilities may request reasonable accommodations or information by contacting Georgia Robillard, Disabilities Services Coordinator, Main Campus, Room #E2114, at (218) 733-7650, 722-6893/TTY, or g.robillard@lsc.mnscu.edu.

This document can be made available in alternative formats, such as large print, Braille, or audio tape, by calling 733-7650 or 722-6893/TTY.

Mission Statement



Vision

Lake Superior College (LSC) continues as an area leader of higher education learning opportunities by delivering excellent instruction, innovative programming, and dedicated service in an engaging, comfortable environment. Lake Superior College will excel in student development and community responsiveness.

Mission

Lake Superior College provides high quality, affordable higher education that benefits diverse learners, employers, and the community. LSC's academic, technical, continuing education, and workforce development offerings prepare learners for a rapidly changing global community. Our services support learning, and our partnerships connect the college and its learners to a broader spectrum of community life.

Our mission is characterized by:

- * A strong sense of community
- * Trust, respect, and integrity
- * Personal attention
- * Accountability
- * Innovation and flexibility
- * Life-long learning and personal growth

Purposes

To accomplish our mission, LSC:

1. Encourages the free exchange of ideas and beliefs and promotes innovation.
2. Provides programs and courses that
 - Enable transfer to other colleges and universities
 - Lead to career opportunity or enhancement
 - Enable continuing education and personal enrichment opportunities
 - Prepare students for college-level work
 - Enrich the social and cultural growth of learners
 - Promote ethical and responsible citizenship
 - Provide customized educational content and delivery systems.
3. Embraces assessment and continuous quality improvement through a college-wide plan designed to measure and improve student academic achievement and institutional effectiveness.
4. Provides comprehensive student services, student life opportunities, and access to learning resources and technologies.
5. Is committed to excellence in teaching as reflected in hiring practices, access to fiscal resources and technology, and the provision of professional development opportunities.
6. Is committed to the integration of general education as appropriate.
7. Establishes collaborative partnerships.

College Values

The Lake Superior College community affirms the worth and dignity of each individual and promotes equity of access and opportunity. These principles form the foundation of our values.

LSC values accessible and lifelong learning opportunities.

To support this value, the College:

- provides a comprehensive educational program
- emphasizes general education outcomes across the college
- provides personal and professional continuing education
- promotes professional development
- provides resources and delivery systems that improve learning, increase access and promote lifelong learning

LSC values equity and diversity.

To support this value, the College:

- provides support services to assist students in meeting their educational and career goals
- provides supplemental support services for students with identified needs
- provides equal opportunity in education and employment
- supports understanding of cultural diversity

LSC values the pursuit of excellence, innovation and initiative.

To support this value, the College:

- has established standards of performance
- adheres to assessment practices designed to improve student academic achievement and institutional effectiveness
- is committed to continuing dialogue with its external constituencies
- promotes and supports initiative and innovation
- promotes and supports a high quality of education

LSC values a sense of community.

To support this value, the College:

- offers student life opportunities that enrich the educational experience
- is committed to assessing needs in the region and within the student body to ensure continued services that meet the needs of constituencies
- has established a governance structure for shared decision-making
- cooperates with other educational systems
- sponsors activities that enrich the community
- fosters an environment of trust, equity, compassion and respect

LSC values academic freedom and free inquiry.

To support this value, the College:

- encourages the free interchange of ideas and beliefs
- promotes innovation and initiative in the classroom

LSC values integrity.

To support this value, the College:

- adheres to standards of financial accountability and disclosure
- is committed to ongoing accreditation for the institution and its programs
- encourages ethical decision-making
- articulates its relationships with other educational institutions
- supports the responsible stewardship of its resources

LSC values all its stakeholders.

To support this value, the College:

- participates in partnerships with business, industry, labor, and government agencies
- participates in partnerships with other educational systems
- facilitates entry into and transfer from Lake Superior College
- offers flexible use of the college facilities, personnel, and services

General Information



About LSC

On July 1, 1995, Duluth's Community and Technical Colleges merged to create a new institution, Lake Superior College. In the years since it was established, LSC has grown substantially, both in terms of courses and programs offered and student enrollment. In the most recent academic year for which statistics are available (2004-05) LSC served 8,545 students and generated 3,478 full year equivalents. LSC offers a wide range of programs and course options including technical programs, transfer programs, continuing education opportunities, customized training courses, and apprenticeship training.

Accreditation

Lake Superior College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. More information on the accreditation process is available directly from:

North Central Association of Colleges & Schools
Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, Illinois 60602-2504
(312) 263-0456 or 800-621-7440

In December, 2002 the Higher Learning Commission authorized LSC to offer its degree programs online.

Several LSC programs have received accreditation from professional associations, including the following:

- * Dental Hygiene is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements."
- * The Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Curriculum Review Board of the American Association of Medical Assistants' Endowment (AAMAE).
- * Medical Laboratory Technician, accredited by the National Accreditation Agency of Clinical Laboratory Science
- * Physical Therapist Assistant, accredited by the Commission on Accreditation in Physical Therapy Education
- * Professional Nursing (RN), accredited by the Minnesota Board of Nursing
- * Practical Nursing, accredited by the Minnesota Board of Nursing

- * Radiologic Technology, accredited by the Joint Review Committee on Education in Radiologic Technology
- * Respiratory Care Practitioner, accredited by the Committee on Allied Health Education and Accreditation, upon the recommendation of the Joint Review Committee for Respiratory Therapy Education

A Great Place to Learn

Lake Superior College is located in one of the Midwest's most unique and beautiful cities, Duluth, Minnesota. The city is a regional center for health care, transportation, retail sales, education, and tourism. In fact, the city attracts more than three million visitors each year. Duluth offers a wide range of recreational and cultural opportunities. Sight-seeing, boating, skiing, music festivals, and sporting events are just a few of the popular activities for students.

Staff and Faculty

LSC students quickly discover that the faculty and staff of the college are friendly, helpful, and concerned about students. Each member of the faculty brings a wealth of education and experience to LSC's classrooms and labs. These dedicated professionals are eager to help students meet their goals. Whether you are planning to transfer to a four-year college or preparing for a new career, LSC staff members are ready to help. In fact, everyone at LSC – faculty, administration, maintenance, and clerical staff – is committed to student success!

For a listing of faculty and administration credentials, see pages 190-196 of this publication.

Affirmative Action/Equal Opportunity

Minnesota's colleges and universities have accepted special roles and responsibilities in fostering diversity in our society. We are dedicated to the search for knowledge and the rights of every individual in our learning communities to pursue that search with freedom, dignity, and security, regardless of race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission. Representing all sectors of higher education in Minnesota, we publicly declare our intention to:

- * continue the development of multicultural learning communities that will not tolerate acts of harassment
- * establish, communicate, and enforce standards of behavior for students, staff, and faculty that uphold our academic values and our legal obligations
- * promote the acceptance and respect for individuals in an atmosphere of caring for others.



Lake Superior College is a member of the Minnesota State Colleges & Universities System.

LSC Students

Approximately 59% of students are female and 41% male. While LSC is primarily a commuter college with the majority of students coming from a 50-mile radius, some programs (e.g., health occupations, fire fighting) do attract students regionally, nationally, and internationally. The availability of Internet-based courses and programs has generated a growing number of online students who reside in distant locations.

The average age of students during the fall term of 2004 was 25.1, however the majority of students were 24 or younger.

Student Life

Lake Superior College provides a student life program that enhances the opportunities for students to become involved in meaningful activities that compliment the academic programs and services of the college.

Student Life Center

The purpose of the Student Life Center is to meet the needs of all the students of Lake Superior College. The Center maintains and creates programs that enhance the student's educational, cultural, recreational, and social experiences while attending LSC. The Center also provides leadership workshops throughout the academic year. The facility and services provided by the Center are open to the entire LSC community. The Student Life program also sponsors intramural sports programs. In recent years activities have included flag football, volleyball, softball, and basketball.

Student Activities

Lake Superior College provides opportunities for student growth through extracurricular activities. These activities enrich higher education for students by providing both educational and social events. By becoming involved in activities such as academic related events, cultural diversity programs, health and fitness programs, student government, and campus clubs, students will share in the ownership of such programs and experience a positive connection to LSC. Although these activities provide many avenues for student growth, the decision to participate is based on personal desire.

All Campus Student Organizations

All Nations/United Multicultural: Works to develop positive community involvement and promote diversity by providing academic, social, and professional support and advocacy on and off campus.

Art/Ceramics Club: Promotes the arts, in any form, to the students of LSC and the community at large.

Environmental Club: Creates awareness and promotes resource conservation and sustainability on the LSC campus.

College Democrats: Affiliated with the National College Democrats of America. The purpose is a college outreach arm of the Democratic Party and focuses on electing Democrats from the grassroots level up.

College Republicans: Involved in the Republican Party focusing on politics at the college level.

Gus Gus Players: Serves students interested in the performing arts.



InterVarsity Christian Fellowship: Serves the Christian community of LSC.

Linux Club: Serves students that have an interest in the Linux computer operating system.

Multi-Cultural Center: Exists to support an atmosphere where human diversity is recognized, respected and nurtured. A few of the services provided are academic support, advising, emergency loan, student advocacy, and scholarship information. The center provides a space and place for students to enhance academic achievement, create a sense of belonging, and celebrates cultural diversity.

Non-Trad Club: Provides support and networking to students enrolled in programs that are non-traditional to their gender.

Outdoor Activity Recreation Club: Serves students interested in outdoor activities and recreation.

Phi Theta Kappa: National Honor Society for two-year colleges that recognize students who have distinguished themselves academically.

Students Against War: An organization to provide up-to-date information about war and its effects.

Student Senate: Official representative student government of LSC. It operates under a constitution that has been approved by the student body and consists of elected representatives and elected officers. The purpose of the Student Senate is to work to improve the quality of education at LSC. In order to address all issues of concern to students, the Student Senate must not only consider campus issues, but state and national issues and/or legislative actions.

Students Helping Students: Designed to aid students in academic affairs by providing them with resources from other students.

Program Related Organizations

American Society of Certified Engineering Technicians (ASCET): A student chapter of the national organization. The goals include promoting dignity of work, professionalism, and community involvement.

Auto Technology: Serves the students enrolled in the Auto Technology Program.

Aviation Club: Serves students interested in aviation.

Broadcasting Club: serves students enrolled in the Broadcasting Program.

Business Professionals of America: Prepares students for the business workforce through the advancement of leadership, citizenship, academic, and technological skills.

Computer Club: serves the interests of students interested in computer careers.

Delta Epsilon Chi: A national organization for college students that helps prepare them for careers in marketing, merchandising or management.

Fire Technology: Serves those enrolled in the Fire Technology program.

Machine Tool and Technology: Serves those enrolled in Machine Technology Program.

Manufacturing Technology Partnership: Serves those interested in manufacturing and design.

Nursing Club: Provides second-year, Associate Degree nursing students the chance to socialize with each other and develop career goals.

Paralegal / Criminal Justice Club: Serves those students enrolled in the Paralegal Program.

Physical Therapist Assistant Club: Helps identify and respond to issues in the profession for students and promotes interaction in the PT and PTA programs.

Practical Nursing Club: Serves those students enrolled in the PN program.

Radiological Tech: Serves the Radiological Tech students at LSC.

Respiratory Care Club: Serves those students in the Respiratory Care program.

American Dental Hygiene Association: Affiliated with SAHDA, a nation dental hygiene association. The club conducts activities related to dental hygiene.

Surgical Technology Club: Serves students enrolled in the Surgical Technology Program.

Facilities

Most of Lake Superior College's programs and services are located on the Trinity Road campus, overlooking Enger Park and the western part of the Duluth-Superior harbor. An expansion completed in 1996 has won national architecture awards for its unique and aesthetically-appealing design. In 2004 the state leg-

islature authorized an expansion to the campus. The \$11.2 million building project is expected to be completed in the Fall of 2007. The Emergency Response Training Center, home to LSC's fire-fighting program, is on a site at the southwest end of Duluth. The college also operates a facility in downtown Duluth, and a flight center at the Duluth International Airport.

Main Campus
2101 Trinity Road
Duluth, MN 55811
(218) 733-7600 or toll free
1-800-432-2884

Emergency Response Training Center
Truck Training Center
11501 Highway 23
Duluth, MN 55808
(218) 626-1074

LSC Workforce Development Center
11 East Superior Street, Suite 125
Duluth, MN 55802
(218) 723-2393

Professional Pilot Training Center
4425 Approach Rd.
Duluth, MN 55811
(218) 723-4880

Lake Superior College Foundation

The recently-formed Lake Superior College Foundation is a charitable, nonprofit corporation established for the sole purpose of supporting the college. The Board of Directors is composed of volunteer community leaders, providing direction and sound fiscal management of Foundation assets.

Services to Students

Admissions

Admissions is located in the Student Services Center and provides services pertaining to admission to Lake Superior College. These services include processing of applications to the college and programs offered at the college, reciprocity forms, international student applications, high school and postsecondary options enrollments, and transcripts received from previous institutions. The Admissions Office also provides information for prospective students and conducts tours of the campus. For information, call (218) 733-7601 or 1-800-432-2884.

Center for Student Development

The Center Student Development provides services to help meet the educational and support needs of LSC students by providing advising on personal and college issues, information and referral to counseling, community resources, seminars/workshops, peer support, networking, and information regarding careers in non-traditional occupations.

Assessment/Placement Testing

Assessment/placement tests are given in mathematics, English composition, and reading to help new students identify their current skills in these areas and to determine appropriate course placements. Incoming students are able to make an appointment through the Student Services Center.

Bookstore

The Lake Superior College Bookstore is one of several college services available for students, faculty, and staff. Bookstore merchandise includes new and used textbooks, backpacks, school and art supplies, imprinted clothing, and required specialty tools and equipment for certain occupational classes (e.g., safety glasses, financial calculators, stethoscopes, etc.) Sales are cash, check, Visa, American Express, or Mastercard, or in some cases may be charged against approved financial aid. Books can also be purchased on-line via the college's website. Book returns will be accepted through the tenth day of each semester (with appropriate receipt). A college book wholesaler conducts a book buy-back during finals week of each semester.

Bulletin Boards

Bulletin boards and student organization posting areas are located throughout the college for students, clubs, and college use. Flyers may be posted by students in designated posting areas if approval is obtained through the Student Life Center. Other displays must be approved by the Director of Public Information or an LSC administrator.

Campus Security

To report criminal activities, unsafe situations, and emergencies, or request assistance or a security escort, contact:

Campus Security Office, W1648, 733-1080 or 522-1019

For detailed information about campus security and crime statistics, request a copy of the annual campus Crime Awareness and Campus Security Report through the Office of the Vice President of Student Services.

Child Care

The college provides a contracted child care service for children ages 33 months to eight years. Students who would like to enroll their children in the Creation Station are advised to contact the center for an application (733-7647). Enrollment is limited. Various types of financial aid may be available for child care expenses. Check with the Financial Aid Department for details regarding eligibility.

Counseling & Advising Services

Counselors are available to assist students with academic and career planning, provide services to assist with family and personal relationship concerns and provide referrals to community agencies. Additionally, the Student Services Center contains career and life planning materials, information about a variety of occupations, as well as access to a variety of career assessment instruments. University/college information is available to assist transfer students. Students can meet with counselors for help in making career and transfer decisions.

Advising - Advisement services are offered to ensure that students can receive ongoing academic advice regarding satisfactory academic and career progress. Advisors are available to assist students in creating educational plans. Careful planning is essential when assisting students in completion of a diploma or degree, transfer to a four-year college, and/or enrolling in courses for enrichment.



Food Service

Food service is available when classes are in session during fall and spring semesters. Snacks and convenience foods are available from a variety of vending machines.

Disability Services

Lake Superior College provides access to programs, services, and activities to qualified students with documented disabilities, as required by law. When an individual requests an accommodation, the college will require the individual to provide documentation of the disability. The college's commitment is to remove educational, programmatic, and attitudinal barriers, allowing students with disabilities equal access and opportunity to participate fully in all educational programs and activities. Reasonable accommodations/services, based on the individual needs of the student, may include, but are not limited to: early registration, note taking, test-taking accommodations, and the provision of sign language interpreters. Additionally, handicapped parking is available in LSC parking lots. Individual with disabilities may request reasonable accommodations or information by contacting Georgia Robillard, Disabilities Services Coordinator, Main Campus, Room #E2114, at (218) 733-7650, 722-6893/TTY, or g.robillard@lsc.mnscu.edu.

Escort Service

The LSC Campus Security Office provides campus escort services. The Security Office is open during the following hours:

Monday - Thursday: 7 a.m. - 10 p.m.

Friday: 7 a.m. - 4 p.m.

Saturday: 9 a.m. - 3 p.m.

Phone number - office, 733-1080 or cell, 522-1019

Financial Aid

Financial Aid services are located in the Student Services Center. Staff are available to assist students with the process of applying for, and receiving, state and federal financial aid as well as scholarships. For additional information about financial aid, see page 12.



Health & Accident Insurance

A student accident and health insurance plan is available to students through an approved MnSCU group plan. Student health insurance is made available to assist those students not covered under family and/or employer plans. Some courses and/or activities may require health and/or liability insurance and all international students are required to carry accident and health insurance.

Health Services

A registered nurse is available for the treatment of minor illness and injury. Referrals will be made for further examination and treatment of more serious conditions. Phone: 733-1092.

Housing

LSC does not own or operate housing or apartment facilities for students living away from home. There are several apartment buildings located near the campus; however, the college does not inspect or certify such housing, nor will it assume responsibility for problems arising from private housing. Notices of available housing and apartment vacancies are listed on bulletin boards located near the commons.

Identification Cards

Student identification cards are available from the LSC Student Life Office at the beginning of each semester. These are used for identification and admission to college functions.

The Learning Center

Academic services such as tutoring and computer-assisted instruction are provided by faculty, professional tutors, and peer tutors. The Center provides supplemental tutoring in such areas as math, reading, study skills, science, writing, and English as a Second Language.

Library

The Harold P. Erickson Library provides access to electronic information systems, print materials (books, periodicals, etc.) and audio, visual, and computer resources. The electronic information system includes PALS (State Library Information Network), on-line CD-ROM data bases, and Internet resources. In addition, the library provides students with access to computers for word processing and other computer applications. Computers

equipped with assistive technologies are available for students with diverse needs.

Instructional support services for students are also located in the library. A variety of materials and services are provided for students who wish to supplement their formal course work, brush up on prerequisites, or study independently.

Lockers

Lockers are available in various areas throughout the college. Some are organized and administered by the Student Senate; some courses or programs may also provide lockers. Contact the Student Life Office for more information.

Lost and Found

Inquiries pertaining to lost and found articles should be made at the college information desk area. The college is not responsible for lost articles, and students are cautioned not to leave valuables unattended.

New Student Registration Sessions

New Student Registration Sessions are provided for new students each semester to assist them in getting acquainted with the college, its policies, various services, financial aid, program planning, course selection, and requirements at LSC. The sessions cover registration, program requirements, and career and transfer advising. Placement testing for reading, writing, and mathematics are required prior to orientation. Time is provided for individual consultations.

New Student Welcome Day

New students are required to attend a New Student Welcome Day session before the beginning of their first term at LSC. The session allows for new students to meet faculty and staff, tour the campus, obtain their student ID's and learn about college services.

Orientation

New students are required to complete LSC's on-line orientation session before registering for classes. The program contains valuable information on college policies and services.

Placement Services

The Placement Center offers a wide range of services to students and alumni, including assistance with resumes and other job-related correspondence, mock interviewing, training on Internet job seeking, an up-to-date library of job search/career materials, and long-distance phone and fax access for job seeking. The Placement Center also sponsors a Job Fair each April to provide in and out of area employment opportunities to students and alumni of the college. A Job Board is located outside the Student Services Center advertising part-time/full-time jobs, and postings that are directly related to programs are mailed to graduates. Placement is also responsible for all work study positions on and off campus.

Student Records

Student Records are located in the Student Services Center, which provides assistance with and retention of students' academic records, including credit transfer, transcripts, and graduation.

Crime Awareness and Campus Security

Pursuant to the Student Right to Know and Campus Security Act, LSC monitors criminal activity and publishes a campus security report each year. The report includes current policies and procedures relating to campus security. The College notifies current and prospective students and employees of its availability annually. LSC will provide a copy of the report to any interested party upon request. Contact the Office of the Vice President of Student Services for more information.

Student Support Services (SSS)

SSS provides support for students with disabilities, low-income, and/or first generation college students who intend to complete an A.A. degree at LSC and plan to transfer into a bachelor degree program. SSS provides support for personal, academic, and career assistance such as tutoring, supplemental instruction, study skills courses, counseling, career exploration, support groups, workshops and seminars, and exposure to diverse cultural activities.

Transfer Preparation

It is important for students to know whether the courses for which they register reflect the latest degree requirements and will transfer to a specific college as a required course, as an elective, or not at all. To obtain this information, contact an advisor. Representatives from four-year colleges and universities are on campus at various times throughout the year.

Transportation

The Duluth Transit Authority (DTA) provides regular bus service to and from the main campus. Students who present their LSC student identification card are allowed to use the DTA at no cost. See the Student Life Office for more information.

Veterans Educational Benefits

Lake Superior College is a Veterans Administration-approved school. The Student Services Center is responsible for certifying a veteran's school enrollment and transmitting that information to the Veterans Administration.

Wellness Center

The LSC Wellness Center is a state-of-the-art facility serving the fitness needs of all students, faculty, and staff on campus. It includes three specific workout areas:

- 1) Exercise/Fitness Suite (Rm. E1104). This attractive workout room includes a 1300 square-foot area equipped with both aerobic exercise equipment and selectorized weight training machines. Treadmills, steppers, rowers, and exercise bikes complement a full circuit of OEI/Cybox resistance machines.
- 2) Free-Weight Exercise Room (Rm. E1118). A fully equipped weight room for the more serious lifter. This room includes a double set of hexhead dumbbells, Olympic bars and plates as well as a variety of specialty benches for working those hard-to-get-at body areas.
- 3) Multi-Purpose Room (Rm. 1114). This area serves many different groups and functions. It is a carpeted and mirrored room with a wall-mounted projection screen and TV/VCR unit that allows lecture type presentations or easily converts to a matted floor facility which lends itself to a variety of physical education activities.

First time participants are required to attend an orientation session and purchase a participant pass for each academic term. Membership costs are \$25/semester for students and \$35/semester for faculty/staff. Yearly memberships are \$50 and \$70, respectively, with summer sessions included free of charge. Passes may be purchased at the Wellness Center during regular hours of operation. Please call 725-7784 for Wellness Center information.

Admissions: General Admissions Procedures

Applications are accepted for fall, spring, and summer terms. The deadline for applications is one week prior to the term you wish to begin classes. However, early application and registration are recommended.

Lake Superior College will admit students who:

- * Have a high school diploma or the equivalent, GED (General Equivalency Diploma)
- * Are currently in high school and meet Post-Secondary Enrollment Options Program or concurrent enrollment criteria, OR
- * Meet the ability to benefit standards by achieving satisfactory scores on the assessment test.

Admission to LSC does not automatically qualify a student for all courses and curricula of the college; some of the programs and/or course offerings have special prerequisites. Academic, fiscal, and facilities considerations may also limit admission to particular programs.

Freshmen

Students with no prior college credit will apply as freshmen to Lake Superior College.

Freshmen applicants must submit:

- * A completed standard MnSCU application form.
- * Non-refundable application fee of \$20.
- * High School transcript or GED scores (if obtained less than 5 years ago).
- * Documentation of Immunization records. Note: Students who have graduated from a Minnesota high school in 1997 or later, or those who were born prior to 1957 are exempt.
- * After acceptance, students must complete the New Student Assessment to determine placement in English and Mathematics courses.

Transfer

Applicants who have earned credit at other post-secondary education institutions will apply as a transfer student to Lake Superior College.

Transfer applicants must submit:

- * A completed Lake Superior College or standard MnSCU application form.
- * Non-refundable application fee of \$20.
- * Official copies of transcripts from each post-secondary institution attended.
- * A copy of final high school transcript or GED scores (if obtained less than five years ago).
- * Documentation of immunization records. Students who have graduated from a Minnesota high school in 1997 or later, or those who were born prior to 1957 are exempt.

- * After acceptance, students may need to complete the New Student Assessment to determine placement in English and Mathematics courses.

International Students

Students (new or transfer) who are not permanent residents or citizens of the United States will be considered for admissions after submitting the following:

- * Completed standard MnSCU application form.
- * Non-refundable \$20 application fee in U.S. dollars.
- * High school transcript, (must be equivalent to a United States high school transcript, translated into English and certified as a true translation).
- * Proof of English proficiency (testing is required for all applicants whose native language is not English). Acceptable documentation of English proficiency includes:
 - a. TOEFL (Test of English as a Foreign Language) score of 500 or more (paper-pencil test) or a score of 173 on computer.
 - b. Michigan Test score of 75 or more
 - c. A resident of an English speaking country or otherwise proficient in the use of the English language.
 - d. English Program for International Students at the University of Minnesota recommendation: "exempt from further ESL ready for full academic load."
- * Affidavit of Financial Support Form
- * F-1 visa issued by the U.S. Consulate or Immigration and Naturalization Service.
- * Proof of health insurance coverage. All international students and visiting scholars engaged in educational activities are required to purchase the Minnesota State Colleges & Universities international student accident and illness insurance plan, unless they can provide written verification that their government or sponsoring agency accepts full responsibility for any medical claims that might occur.

Postsecondary Enrollment Options Act (PSEO)

The purpose of the PSEO program is to promote rigorous educational pursuits and to provide a wider variety of options for Minnesota's 11th and 12th grade high school students. In order to enroll at LSC, students must discuss the program with their high school counselor and then contact the LSC Student Services Center. These programs are not available during the summer sessions.

Application Deadlines:

- * Fall - June 10
- * Spring - December 10

PSEO Eligibility:

- * High school seniors may be considered for enrollment if the high school certifies the student as being at or above the 50th percentile in class rank. If the high school does not compute rank, a high school senior may be considered on the basis of an overall GPA of 2.5 or greater.
- * High school juniors may be considered for enrollment, if the high school certifies the student as being at or above the 66th percentile in class rank. If the high school does not compute rank, a high school junior may be considered on the basis of an overall GPA of 3.0 or greater.
- * PSEO students must meet college level placement scores in reading, English and math through the computerized placement test. If the test scores indicate a lack of preparation for college-level work, PSEO enrollment will not be approved.



PSEO Application Procedure: Students must complete and submit the following:

- * Standard MnSCU application form.
- * PSEO Guidance Counselor or Home School Parent Form.
- * State PSEO Notice of Student Registration Form. There is a section to be completed by the student and parent, and a section to be completed by the high school or home school parent.
- * An official copy of the student's high school transcript.
- * Students must arrange to take the computerized placement test to determine college level placement in reading, English and mathematics.

Ability to Benefit

Students who do not have a GED or high school diploma may qualify for admissions under the Ability to Benefit Policy. To qualify, students must take the computerized placement test and achieve satisfactory scores, as set by the U.S. Department of Education.

Campus Tours

Visitors are always welcome at Lake Superior College!

Campus tours are available most week days at either 11:00 a.m. or 2:00 p.m. You can schedule your campus tour at our website at www.lsc.mnscu.edu or by calling 1-800-432-2884 or locally at 218-733-7601. To ensure that you get the most out of your visit to Lake Superior College, we ask that you please schedule the visit at least 48 hours in advance.

Financial Aid

The purpose of financial aid is to provide financial resources to students who would otherwise be unable to pursue postsecondary education. The student and the student's family are primarily responsibility for meeting educational expenses. Financial assistance is intended to supplement these funds, not replace them. All funds are awarded to students in accordance with federal or state statutory requirements.

Most financial assistance is based on need, which is defined as the difference between the cost of attending LSC and the expected family contribution (calculated by the U.S. Department of

Education). Depending upon need, financial assistance may include grants, loans and/or work study.

Applying for Financial Aid

The financial aid process and other pertinent information are available on the Lake Superior College's financial aid website located at www.lsc.mnscu.edu. As the information listed below merely highlights the financial aid process, it is suggested that you use the website as your primary resource for Lake Superior College financial aid information.

You are required to complete and submit the Free Application for Federal Student Aid (FAFSA). Although a paper version of the FAFSA is available from most colleges and high schools, the preferred method of submitting the FAFSA is via the Internet at www.fafsa.ed.gov. Filing on the Internet is both faster and more accurate than submitting a paper application. Be sure to indicate Lake Superior's College code (005757) when submitting the FAFSA.

Approximately 48-72 hours after electronically filing your FAFSA, you should be able to access processing information regarding your FAFSA at the FAFSA website. LSC will also receive the information at that time. Lake Superior College will contact you if any additional information is required before your eligibility for financial assistance can be determined.

Once Lake Superior College has received all required information, you will be sent an "award letter" listing the types and amounts of financial aid you are eligible to receive along with information on how to apply for federal Stafford loan programs.

Sources of Financial Aid

LSC offers the following types of financial aid. To receive any of these types of aid, you must meet that aid type's eligibility criteria. Both the aid type and the criteria are discussed in depth at the Lake Superior College financial aid website. (www.lsc.mnscu.edu)

Financial Aid

Federal Programs

- Pell Grant
- Supplemental Education Opportunity Grant
- Federal Stafford loans (subsidized and unsubsidized)
- Federal PLUS loans
- Federal Work Study

State of Minnesota Programs

- State Grant
- Child Care Grant
- Indian Scholarship
- Student Educational Loan Fund (SELF)
- State Work Study

Agency Funding

- Division of Rehabilitation Services Grants (DRS)
- Indian Tribal Grants
- Job Training funds (JTPA/WIA)
- Veteran's Benefits

Scholarships

- Lake Superior College Foundation Scholarships
- Ordean Scholarships

What If I Have Questions About Financial Aid?

Please contact:

- Student Services Center
- Lake Superior College
- 2101 Trinity Road, Duluth, MN 55811-3399
- (218) 733-7601 or 1-800-432-2884 ext. 7601
- www.lsc.edu

Information regarding financial aid disbursements, application deadlines, available scholarship programs, and miscellaneous financial aid information is available in the Student Services Center.

Tuition and Fees

For the current tuition rate, please refer to the LSC website at www.lsc.edu or contact the LSC Student Payment Office.

Please note: **Tuition and fees are subject to change annually.** Please check the web site for the most current information.

Tuition Payment

Tuition payment is due prior to the first day of classes each term to avoid late fees (exception, see Deferred Payment). Payment arrangements* can be made with the Student Payment Office.

*Minimum 1/3 down payment and must complete and sign a Deferred Payment Agreement at the Student Payment Office. There is a \$10.00 fee for this service.

Deferred Payment

Enrollment is completed only after students have paid their tuition/fees in full. Exceptions to this requirement will be granted to non-sponsored students and/or any person whose fees will be paid in full by a governing agency or established organization with payment to be made to the college. The Student Payment Office must be notified so that payment can be deferred.

Application Fee

A nonrefundable fee of \$20 is charged to each new student applying for admission to a certificate, diploma, or degree program.

Technology Fee

A technology fee of \$8 per credit is charged to each student.

Parking Fee

A parking fee equal to \$2 per credit + tax is charged.

Special Fees

Fees such as liability insurance, physical education course fees, or test fees may be assessed.

Experiential Learning Credit Fee

A fee equal to 40% of tuition.

Credit by Exam Fee

A fee equal to 40% of tuition.

Books and Supplies

Textbooks and general supplies are available in the Bookstore, as well as tools and equipment for specific occupational programs.

Deposit for Special Programs

Some programs require a nonrefundable deposit that will be credited toward tuition once a student is enrolled in the program.

State Student Association Fees

Each term, students are required to pay a nonrefundable fee of \$.28 per credit to support the state student organization.

Student Activities Fee

A nonrefundable student life fee of \$4.60 per credit up to 16 credits, is charged to each student to support student clubs and activities.

Health Fee

Each term, students are required to pay a nonrefundable fee of \$.85 per credit to support the college's health center.

Graduation Fee

Each student attending graduating is charged a \$10 graduation fee.

Transcript Fee

LSC will provide one diploma and transcript without charge to each student upon graduation. A fee is charged for additional official (\$5) and unofficial transcripts (\$3).

Note: Fees are subject to change annually.

Reciprocity Agreements

By completing the "Reciprocity Program Application for Resident Fee Status" and being approved for reciprocity resident status, North Dakota, South Dakota, Wisconsin, and Manitoba residents may attend public institutions in Minnesota at reduced tuition. Admission requirements are identical to those for Minnesota residents. Potential out-of-state students interested in attending LSC can obtain applications from the Student Services Center or contact:

North Dakota Board of Higher Education
State Capitol Bldg.
600 E. Blvd. Ave.
Bismarck, ND 58505-0230
(701) 328-4113

South Dakota Board of Regents Reciprocity Program
Box 2201 University Station
Brookings, SD 57007-1198
(605) 688-4493

Wisconsin Higher Education Aids Board
Reciprocity Program
Box 7885
Madison, WI 53707-7885
(608) 267-2209

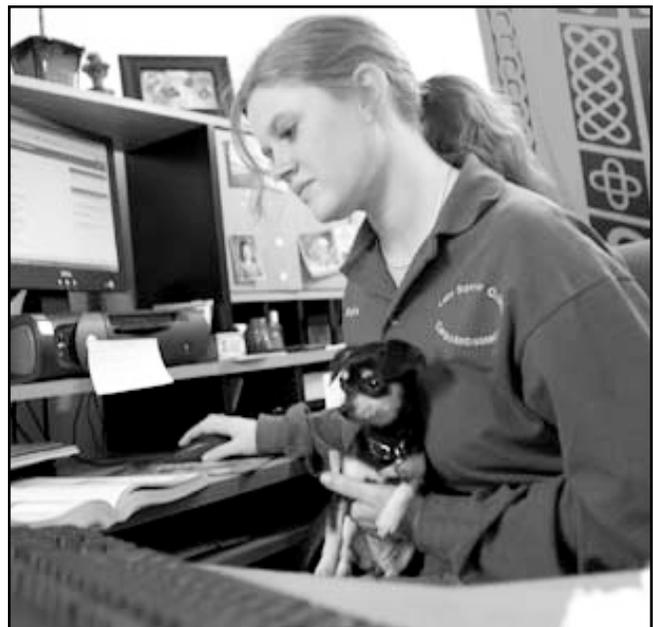
Midwest Student Exchange Program (MSEP)
The Midwest Student Exchange Program enables residents of Kansas, Michigan, Minnesota, Missouri, and Nebraska to enroll at Lake Superior College at a reduced tuition rate. Tuition and eligibility are determined by MSEP. Potential out-of-state students interested in attending LSC can obtain information from the Admissions Office or contact:

Midwest Student Exchange Program
1300 South Second Street, Suite 130
Minneapolis, MN 55454-1015
Phone: (612) 626-8288
Fax: (612) 626-8290
E-mail: mhec@tc.umn.edu

More information is available on the World Wide Web at:
<http://www.umn.edu/mhec/>

Refunds

For information about refunds of tuition and fees, see the policies on page 182.



General Education Mission Statement

Philosophy

Lake Superior College affirms its commitment to offering a broad based, coherent foundation of general education. Our graduates leave LSC with a core of general knowledge, skills, and the motivation to continue learning. Lake Superior College graduates are prepared to live fully and responsibly, adapting to a changing, diverse, and global society. We provide exceptional teaching and learning opportunities through which students gain knowledge, understanding and experience in a coherent program which facilitates the development of skills in the following areas:

- * Communication Skills
- * Information Technology Skills
- * Critical Thinking Skills
- * Self-Development Skills
- * Citizenship Skills
- * Computation Skills

Certified programs of 20 to 29 credits will be required to address the skill areas of Communications, Interaction, and Critical Thinking.

Diploma programs of 30 to 45 credits must address the skill areas of Communications, Interaction, Critical Thinking, and one additional area of choice according to subject matter (to be determined by program faculty and included in program literature).

Diploma programs of 46+ credits, and all degree programs must include all the defined College-Wide Outcome skill areas.

Validation of achievement must take place prior to graduation according to the assessment plan. Validation will be a process of data collection, using the results to make program/course improvements, which will increase student achievement of the outcomes.

College-wide Outcomes

College-wide Outcomes are the six general standards that serve as the foundation for education at LSC.

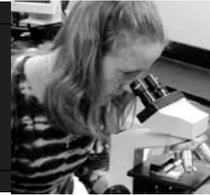
1. Information Technology- The student will be able to:
 - 1.1 Demonstrate the ability to access information using computers
 - 1.2 Demonstrate the ability to produce computer-generated documents
2. Communication- The student will be able to:
 - 2.1 Demonstrate the ability to interact collaboratively within a group to complete an assigned task
 - 2.2 Describe how human diversity affects communication
 - 2.3 Deliver a clear, well-organized verbal presentation
 - 2.4 Compose a clear, well-organized document that is professional in appearance and content
3. Self-development- The student will be able to:
 - 3.1 Set personal and professional goals and develop strategies to reach them
 - 3.2 Describe techniques to attain realistic levels of personal health and wellness
 - 3.3 Describe the benefits of life-long learning
4. Critical Thinking- The student will be able to:
 - 4.1 Gather pertinent factual information and apply it to a given problem
 - 4.2 Explore possible assumptions, interpretations, or perspectives related to solving a problem
 - 4.3 Analyze the logical connections among the facts, goals, and implicit assumptions relative to the situation
 - 4.4 Articulate the values affecting decisions, interpretations, and analyses made by ourselves and others
5. Computational Skills- The student will be able to:
 - 5.1 Identify and extract relevant numerical data from a problem/situation
 - 5.2 Obtain correct mathematical results and describe them
6. Citizenship- The student will be able to:
 - 6.1 Demonstrate involvement in the community at large
 - 6.2 Describe an issue of concern to the community at large and develop an informed response

Philosophy of Assessment

Lake Superior College is committed to quality learning experiences for its students and a cycle of continuous improvement. By continually assessing the educational environment at LSC, we strive to maintain the high quality of instruction in all our curricula.

Students may be required to participate in college-wide assessment activities as part of individual courses or as part of college-wide projects in which all students or a representative sample of students participate. The results of these activities will be used to improve learning, programming and services. The assessment of learning will occur at selected intervals throughout students' educational careers at LSC.

Academic Information



- Programs for Transfer
- Technical Programs
- Course Descriptions



Curriculum is subject to change. In order to maintain academic excellence, LSC's courses and programs are reviewed and revised on an ongoing basis. See your advisor for current program planners or check the LSC web site for updates.

Programs for Transfer



Lake Superior College offers the following options to students who intend to transfer to a baccalaureate program:

Associate in Arts Degree

An Associate in Arts degree will be awarded to a student completing at least sixty semester credits in selected courses numbered 1000 or above with a minimum grade point average of 2.00. Courses must fulfill the categories of: Communication, Science/Mathematics, Social and Behavioral Sciences, Humanities, and two credits of Physical Education, as outlined on the following pages or current program planner. Forty of the sixty credits must fulfill the Minnesota Transfer Curriculum requirements. The remainder of the credits will count as electives.

Minnesota Transfer Curriculum

The Minnesota Transfer Curriculum is a package of 40 semester credits that will be accepted for transfer by all Minnesota Community Colleges, State Universities, and the University of Minnesota, as well as many private colleges.

Associate in Science Degree

The Associate in Science degree presents two different tracks: Professional and Pre-professional.

- 1) Professional: Lake Superior College currently offers this degree in Radiology and Registered Nursing. Please refer to the Radiologic Technology and Registered Nursing programs for the description of the professional programs.
- 2) Pre-Professional: The Associate in Science degree is awarded to students in pre-professional programs or with majors which have strong emphasis in mathematics and or science. Students who choose this option instead of an AA will take 26 credits in math and science courses in addition to the AA requirements on the following pages.

Both the professional and the pre-professional degrees are intended to be transferred to baccalaureate programs.

Admission to any institution is an issue separate from transfer. All transfer students must meet admission requirements, including a certain grade point average, for the institution or programs to which they transfer. We encourage you to contact the college to which you wish to transfer for all pertinent information.

Courses for transfer are taught in the following disciplines:

- Accounting
- Anthropology
- Art
- Biology
- Business
- Chemistry
- Computer Science
- Economics
- Education
- English
- Environmental Science
- French
- Geography
- Geology
- History
- Humanities
- Mass Communication
- Mathematics
- Music
- Philosophy
- Physical Education
- Physics
- Political Science
- Psychology
- Sociology
- Spanish
- Speech
- Statistics
- Theater

Minnesota Transfer Curriculum and Associate in Arts Degree Requirements 2005-2007

- AA > 60 CREDITS TOTAL
Areas 1 - 6 and PE: Minimum requirements in parentheses.
40 credits minimum required in Areas 1 - 10.
- AS > 60-64 CREDITS TOTAL
Areas 1 - 6: Minimum requirements in parentheses (must total 30 credits).
- AAS > 18-20 CREDITS TOTAL
3 credits minimum required in each Area: 1, 3 or 4, 5A or 5B, and 6.
- MNTC > 40 CREDITS TOTAL
A minimum of 3 credits per Goal Areas 1 - 10.

Note: A listed course may meet two (2) competency areas, but credits will be counted only once.

* Denotes literature course

2.0 minimum GPA required for MNTC and all above-stated degrees. May include accepted transfer credits.

PART I

GOAL 1 – COMMUNICATION (CO): (9 Credits Minimum)

Goal: 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 the 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.

- ENGL 1106 College Composition I (Required) (3 credits)
- ENGL 1109 College Composition II (Required for AA) (3 credits)(HU)

AND FOR AA - ONE OF THE FOLLOWING

- SPCH 1100 Fundamentals of Human Communication (3 credits)
- SPCH 1105 Interpersonal Communication (3 credits)
- SPCH 1110 Methods of Public Speaking (3 credits)
- SPCH 1115 Intercultural Communication (3 credits)(DI)

GOAL 2 – CRITICAL THINKING (CT): Requirements met by 40 credit MTC requirement.

Goal: To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought. Critical thinking skills will be taught and used throughout the General Education Curriculum in order to develop student 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.

Infused Across the Minnesota Transfer Curriculum Courses.

GOAL 3 – NATURAL SCIENCES (NS): (6 Credits Minimum)
(Select two courses from the following list of laboratory science courses.)

Goal: To improve a student's understanding of natural science principles and of the methods of scientific inquiry (i.e., the ways in which scientists investigate natural science phenomena.) 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 in their lives and to understand the value of a scientific perspective.

- BIOL 1001 Human Body in Health and Disease (5 credits)
- BIOL 1105 Biology of Women (3 credits)(DI)
- BIOL 1110 Minnesota's Natural Heritage (4 credits)(EN)
- BIOL 1120 Principles of General Biology (5 credits)(EN)
- BIOL 1130 General Biology of Organisms (5 credits)(EN)
- BIOL 1140 Human Anatomy and Physiology I (4 credits)
- BIOL 1141 Human Anatomy and Physiology II (4 credits)
- BIOL 1150 Human Anatomy (5 credits)
- BIOL 1160 Human Physiology (4 credits)
- BIOL 1170 Microbiology (3 credits)
- BIOL 2160 Advanced Physiology (2 credits)
- BIOL 2200 General Ecology (4 credits)(EN)
- BIOL 2205 Limnology (3 credits)(EN)
- BIOL 2300 Student Research (1-3 credits)
- BIOL 2400 Topics in Biology (1-3 credits)
- CHEM 1110 Aspects of Chemistry I (3 credits)
- CHEM 1111 Aspects of Chemistry II (2 credits)
- CHEM 1210 General Chemistry I (5 credits)
- CHEM 1211 General Chemistry I (5 credits)
- CHEM 1310 General Chemistry of Solutions (3 credits)
- CHEM 2110 Organic Chemistry I (5 credits)

Codes in parenthesis indicate that the identified course also meets the graduation requirements in another category:

- CO = Communication
- CT = Critical Thinking
- DI = Human Diversity
- EN = People and the Environment
- ET = Ethics and Civic Responsibility
- GL = Global Perspective
- HI = History
- HU = Humanities and Fine Arts
- MA = Mathematical/Logical Reasoning
- NS = Natural Sciences
- SO = Social and Behavioral Sciences



CHEM 2111	Organic Chemistry II	(5 credits)
ENSC 1200	Introduction to Environmental Science	(4 credits)(EN)
GEOG 1120	Physical Geography	(4 credits)(EN)
GEOL 1110	Introduction to Geology	(4 credits)(EN)
PHYS 1001	Fundamental Concepts of Physics	(4 credits)
PHYS 1101	Introductory Astronomy	(4 credits)(MA)
PHYS 1170	Physics for the Medical Community	(4 credits)
PHYS 1201	Introduction to Physics I	(5 credits)
PHYS 1202	Introduction to Physics II	(5 credits)
PHYS 2201	General Physics I	(5 credits)
PHYS 2202	General Physics II	(5 credits)

GOAL 4 – MATHEMATICAL/LOGICAL REASONING (MA): (3 Credit Minimum) ONE COURSE IS REQUIRED.

Goal: To increase a student's 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.

MATH 1100	College Algebra	(4 credits)
MATH 1105	Principles of Mathematics	(3 credits)
MATH 1110	Finite Mathematics	(4 credits)
MATH 1120	Survey of Calculus	(3 credits)
MATH 1130	Trigonometry	(3 credits)
MATH 1150	Pre-Calculus	(4 credits)
MATH 2204	Calculus I	(5 credits)
MATH 2205	Calculus II	(5 credits)
MATH 2206	Multi-Variable Calculus	(4 credits)
MATH 2215	Introduction to Linear Algebra	(3 credits)
MATH 2220	Differential Equations	(4 credits)
PHIL 1125	Logic	(3 credits)(HU)
PHYS 1101	Introductory Astronomy	(3 credits)(NS)
STAT 2210	General Statistics	(3 credits)

GOAL 5A – HISTORY (HI): AA = Total (9 Credits Minimum) between Goal 5A and

Goal 5B – ONE COURSE IS REQUIRED FROM 5A.

Goal: To increase a student's knowledge of how historians 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.

ART 1120	Introduction to Art History	(3 credits)(HU)
ART 1138	Ceramics I	(3 credits)(HU)
ART 1139	Ceramics II	(3 credits)(HU)
ART 1140	Ceramics III	(3 credits)(HU)
ART 1145	Fibers	(3 credits)(HU)
ART 1210	Three-Dimensional Design	(3 credits)(HU)
ART 1300	Sculpture Workshop	(1 credit)(HU)
ART 1305	Ceramics Workshop	(1 credit)(HU)
ART 2100	Sculpture	(3 credits)(HU)
ART 2105	Sculptural Casting in Clay	(3 credits)(HU)
HIST 1110	European History 3000 B.C. to 1870	(3 credits)(DI)
HIST 1120	European History 1870 to Present	(3 credits)(HU)
HIST 1210	American History 1640 to 1876	(3 credits)(DI)
HIST 1220	American History 1876 to Present	(3 credits)(DI)
HIST 2110	Minnesota History	(3 credits)
HIST 2130	Vietnam: America's Longest War	(3 credits)(ET)
HUM 1105	Introduction to Popular Culture	(3 credits)(HU)
HUM 1110	The Bible as Literature	(3 credits)(HU)*
HUM 1125	Introduction to the Arthurian Legend	(3 credits)(HU)*
HUM 2010	Understanding Archetype, Dream, and Symbol	(3 credits)(HU)*

GOAL 5B – SOCIAL AND BEHAVIORAL SCIENCES (SO): AA = Total (9 Credits Minimum) between Goal 5A and Goal 5B - ONE COURSE IS REQUIRED FROM 5B.

Goal: To increase a student's knowledge of how 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.

ANTH 1110	Cultural Anthropology	(3 credits)(GL)
ANTH 1120	Cultures of North American Indians	(3 credits)(GL)
ANTH 1125	Physical Anthropology and Archaeology	(3 credits)(GL)
ANTH 2115	World Ethnography	(3 credits)(EN)
ECON 1100	Introduction to Economics	(3 credits)(GL)
ECON 1150	Principles of Economics: Macroeconomics	(3 credits)(GL)
ECON 1160	Principles of Economics: Microeconomics	(3 credits)
GEOG 1110	Human Geography	(3 credits)(GL)

HUM 2100	Children's Media - Origins and Interpretations	(3 credits)(HU)*
PSCI 1110	American Government	(3 credits)(ET)
PSCI 1120	Introduction to Political Science	(3 credits)(ET)
PSCI 1130	State and Local Government	(3 credits)(ET)
PSCI 1140	International Politics	(3 credits)(GL)
PSYC 1120	General Psychology	(3 credits)(DI)
PSYC 1135	Human Development	(3 credits)(DI)
PSYC 2125	Child Psychology	(3 credits)
PSYC 2130	Adolescent Psychology	(3 credits)
PSYC 2140	Abnormal Psychology	(3 credits)(DI)
PSYC 2150	Psychology of Aging and Elderly	(3 credits)(DI)
SOC 1111	Introduction to Sociology	(3 credits)(DI)
SOC 1112	Comparative Sociology	(3 credits)(DI)
SOC 1125	Social Deviance	(3 credits)(GL)
SOC 1130	Crime and Delinquency	(3 credits)
SOC 1140	Marriages and Families	(3 credits)(DI)
SOC 1145	Race, Class, and Gender	(3 credits)(DI)
SOC 1150	Introduction to Women's Studies	(3 credits)(DI)
SOC 1155	Human Sexuality	(3 credits)(DI)
SOC 2120	Social Problems	(3 credits)(DI)
SOC 2121	Social Solutions: The Sociology of Positive Social Change	(3 credits)(GL)
SOC 2122	Sociology of the Community	(3 credits)(GL)
SOC 2170	Sociology of Birth and Death	(3 credits)
SOC 2171	Sociology of Sport	(3 credits)(DI)

GOAL 6 – HUMANITIES AND FINE ARTS (HU):
 (9 Credits Minimum MUST Include One Literature Course.
 No More Than Three (3) One-Credit Courses in Art,
 Humanities, Music, Spanish, or Theater May Be Used.)
 Languages Do NOT Fulfill the MNTC.

Goal: To expand a student's knowledge of the human condition and 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, 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.

ART 1110	Two-Dimensional Design	(3 credits)
ART 1115	Painting I	(3 credits)
ART 1116	Advanced Painting	(3 credits)
ART 1120	Introduction to Art History	(3 credits)(HI)
ART 1125	Watercolor	(3 credits)
ART 1130	Introduction to the Studio Arts	(3 credits)(ET)
ART 1138	Ceramics I	(3 credits)(HI)
ART 1139	Ceramics II	(3 credits)(HI)
ART 1140	Ceramics III	(3 credits)(HI)
ART 1145	Fibers	(3 credits)(HI)
ART 1151	Drawing I	(3 credits)
ART 1152	Drawing II	(3 credits)
ART 1160	Printmaking	(3 credits)
ART 1199	Special Topics in Art	(1-3 credits)
ART 1210	Three-Dimensional Design	(3 credits)(HI)
ART 1300	Sculpture Workshop	(3 credits)(HI)
ART 1305	Ceramic Workshop	(3 credits)(HI)
ART 2100	Sculpture	(3 credits)(HI)
ART 2105	Sculptural Casting in Clay	(3 credits)(HI)

ART 2199	Independent Study	(1 credit)
ENGL 1100	Creative Writing	(3 credits)
ENGL 1109	College Composition II	(3 credits)(CO)
ENGL 1110	Literature of the American West	(3 credits)*
ENGL 1115	Introduction to Literature: The Short Story	(3 credits)*
ENGL 1120	Introduction to Literature: The Novel	(3 credits)*
ENGL 1130	Science Fiction	(3 credits)*
ENGL 1140	Introduction to Literature: Poetry	(3 credits)*
ENGL 1150	Multicultural Literature	(3 credits)*
ENGL 1170	From Literature to Film	(3 credits)*
ENGL 1210	Introduction to Literature: Drama	(3 credits)*
ENGL 2101	English Literature 12th to 17th Century	(3 credits)*
ENGL 2102	English Literature 18th Century to Present	(3 credits)*
ENGL 2105	American Literature I	(3 credits)*
ENGL 2106	American Literature II	(3 credits)*
ENGL 2120	Introduction to African-American Literature	(3 credits)(DI)*
ENGL 2130	Introduction to Native American Literature	(3 credits)(DI)*
ENGL 2140	World Literature	(3 credits)(GL)*
ENGL 2150	Shakespeare, the Elizabethan Age, and Contemporary Perspectives	(3 credits)(GL)*
HIST 1120	European History 1870 to Present	(3 credits)(HI)
HUM 1101	Introduction to Humanities: The Classical Through Medieval Periods	(3 credits)(GL)
HUM 1102	Introduction to Humanities: The Renaissance Through the Contemporary Periods	(3 credits)(GL)
HUM 1105	Introduction to Popular Culture	(3 credits)(HI)
HUM 1110	The Bible as Literature	(3 credits)(HI)*
HUM 1125	Introduction to Humanities: The Arthurian Legend	(3 credits)(HI)*
HUM 1130	Comparative Religion	(3 credits)(GL)
HUM 1135	Utopian Images: Fiction and Fact	(3 credits)(DI)*
HUM 1140	Modern Fantasy	(3 credits)(DI)*



SOC 1135	Introduction to African-American Culture	(2 credits)(DI)
SOC 1175	Introduction to Gerontology	(3 credits)(DI)
SOC 2121	Social Solutions: The Sociology of Positive Social Change	(3 credits)(SO)
SOC 2122	Sociology of the Community	(3 credits)(SO)
SPCH 1120	Media, Persuasion, and Society	(3 credits)(ET)

GOAL 9 – ETHICS AND CIVIC RESPONSIBILITY (ET):
(3 Credit Minimum)

Goal: To develop a student's 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 others' positions.

ART 1130	Introduction to the Studio Arts	(3 credits)(HU)
HIST 2130	Vietnam: America's Longest War	(3 credits)(HI)
MACO 1200	Introduction to Media: The Genres of Journalism	(3 credits)(GL)
MACO 1205	Introduction to Media: Journalistic Perspective	(3 credits)(GL)
PHIL 1130	Ethics	(3 credits)(HU)
PHIL 2150	Political Philosophy	(3 credits)(HU)
PSCI 1110	American Government	(3 credits)(SO)
PSCI 1120	Introduction to Political Science	(3 credits)(SO)
PSCI 1130	State and Local Government	(3 credits)(SO)
SOC 1114	Introduction to Criminal Justice	(3 credits)(DI)
SPCH 1120	Media, Persuasion, and Society	(3 credits)(GL)

GOAL 10 – PEOPLE AND THE ENVIRONMENT (EN):
(3 credit minimum)

Goal: To improve a student's 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 socio-cultural systems is the foundation for integrative and critical thinking about environmental issues.

ANTH 1301	Cultures of Meso America	(3 credits)(GL)
ANTH 2115	World Ethnography	(3 credits)(SO)
BIOL 1110	Minnesota's Natural Heritage	(4 credits)(NS)
BIOL 1120	Principles of General Biology	(5 credits)(NS)
BIOL 1130	General Biology of Organisms	(5 credits)(NS)
BIOL 2200	General Ecology	(4 credits)(NS)
BIOL 2205	Limnology	(3 credits)(NS)
ENSC 1200	Introduction to Environmental Science	(4 credits)(NS)
GEOG 1120	Physical Geography	(4 credits)(NS)
GEOL 1110	Introduction to Geology	(4 credits)(NS)

PART II: Additional AA Requirements - Physical Education requirements (2 Credits) Required for AA

PART III: Additional Elective Credits - (MUST BE ABOVE 1000) (A Maximum of 4 Workshop Credits Will Count Toward the AA) (16 Credits May Come From Occupational Courses)



Technical Programs



Business Careers

Accountant – 70 Credits

Associate in Applied Science Degree Program

The Accountant program trains students in the preparation of financial statements, budget analysis, cost and managerial accounting, income tax applications and payroll accounting. Students also learn to use some of the more popular accounting software, including Microsoft Office, Peachtree Accounting, Great Plains Accounting, and Turbo Tax. A total of 18 credits of general education courses are needed to complete the degree. Upon successful completion of the A.A.S. in Accounting, the student should be well prepared to sit for the Accredited Business Accountant exam. This comprehensive examination is administered by the Accreditation Council for Accountancy and Taxation. Sitting for this professional exam is highly recommended, but not a requirement of the LSC program.

Course #	Course Title	Credits
ACCT1400	Accounting Math	2
ACCT1420	Intro to Financial Accounting (Accounting Majors)	3
ACCT1500	Personal Finance	3
ACCT1520	Accounting Principles & Concepts	3
ACCT1530	Payroll Accounting	3
ACCT1550	Tax Accounting I	3
ACCT2410	Spreadsheet Concepts and Applications for Accounting	2
ACCT2420	Intermediate Accounting I	4
ACCT2430	Managerial Accounting	3
ACCT2450	Tax Accounting II	3
ACCT2460	Computerized Apps in Accounting	2
ACCT2520	Intermediate Accounting II	4
ACCT2570	Comprehensive Review for Accreditation in Accounting	4
ADSC1420	Business Communications	3
ADSC1430	Integrated Software Apps I	3
ADSC1431	Integrated Software Apps II	3
COMM1601	HR-The Individual in Career or Classroom	1
ECON1150	Principles of Economics – Macro	3
ECON1160	Principles of Economics-Micro	3
ENGL1106	College Composition I	3
LGST1420	Business Law/Intro	3

Minnesota Transfer Curriculum:		
Math (any course 1100 or above)		3
Humanities (any course 1100 or above)		3
Non-designated		3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Successfully complete a comprehensive problem requiring the preparation of the basic financial statements
- Successfully complete a comprehensive problem requiring the preparation of an individual income tax return

- Successfully complete a comprehensive problem requiring all of the steps of the accounting cycle, using general ledger software
- Successfully complete a comprehensive problem requiring the analysis and correction of a set of financial statements
- Successfully complete a comprehensive accounting exam, similar to those given by the Accreditation Council for Accountancy and Taxation

Administrative Office Specialist – 66 Credits

Associate in Applied Science Degree Program

This program is designed to prepare the student for employment as an Administrative Office Specialist. Administrative Office Specialists may perform duties such as preparing correspondence, filing, calendaring, handling mail, and computerized applications. In addition, they may be asked to assume responsibility for composing and dictating letters, recording meeting minutes, collecting data and performing research, generating reports, maintaining budgets and other accounting applications, and supervisory duties.

Course #	Course Title	Credits
ADSC1415	Keyboarding I	4
ADSC1416	Keyboarding II	4
ADSC1420	Business Communications	3
ADSC1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software App I	3
ADSC1431	Integrated Office Software App II	3
ADSC1432	Office Capstone	2
ADSC1440	General Office Procedures	3
ADSC1441	Bookkeeping	2
ADSC1442	Records Management	2
ADSC1452	General Transcription	2
ADSC1517	Computers in the Law Office	3
ADSC1715	Word Processing	2
ADSC1716	Advanced Word Processing	2
ADSC1718	Keyboarding Drills	1
ADSC2410	Desktop Publishing	2
ADSC2497	Internship	3
ACCT1520	Accounting Principles & Fundamentals	3
COMM1105	Interpersonal Communication	3
MKTG2770	Principles of Mgmt & Supervision	3
ENGL1106	College Composition I	3
ENGL1109	College Composition II	3
	General Education electives	3

Minnesota Transfer Curriculum:		
Social/Behavioral Science		3
Humanities		3
Communications		9
Non-designated		3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Plan and produce professional written business correspondence using correct English and proofreading skills
- Plan and deliver verbal presentations using correct English skills

- Demonstrate keyboarding production proficiency
- Apply ARMA indexing and filing procedures and rules
- Transcribe various types of material into mailable documents using correct English skills
- Exhibit ethical behavior, positive self-image, and professional conduct
- Utilize computer productivity software for business applications
- Develop a job search plan, appropriate documents, and exhibit appropriate interview skills
- Apply learned program skills and knowledge to work or simulated situations
- Analyze and record business transactions, generate reports, and prepare financial statements
- Demonstrate coordinating and supervisory responsibilities
- Utilize computer productivity software with desktop publishing applications

Administrative Support-Legal Secretary – 36 Credits Diploma Program

This program is designed to prepare the student for employment as a legal secretary. The legal secretary's primary function is to assist in preparation of legal correspondence and documents and in meeting deadlines. Other duties may include public/client relations, timekeeping, gathering information from clients, filing, and general office duties. Legal secretaries transcribe from dictation and draft copy using microcomputers.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1415	Keyboarding I	4
ADSC1420	Business Communications	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1442	Records Management	2
ADSC1452	General Transcription	2
ADSC1440	General Office Procedures	3
	OR	
ADSC1511	Law Office Procedures I	(3)
ADSC1512	Law Office Procedures II	4
	OR	
LGST1400	Legal Studies I: Terminology, Procedures, and Documentation	(3)
	AND	
Business Elective		1
ADSC1515	Law Office Applications	4
ADSC1520	Legal Keyboarding	2
ADSC1525	Legal Transcription/Word Proc. Apps.	2
ADSC1530	Law Office Capstone	1
ADSC1715	Word Processing	2
LGST1420	Business Law	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate keyboarding production proficiency
- Perform general office tasks in the legal environment
- Apply ARMA indexing and filing procedures and rules
- Demonstrate proficiency in using a variety of computer software programs
- Transcribe material containing legal terminology into mailable documents using correct English skills
- Produce professional written business correspondence using correct English and proofreading skills
- Plan and deliver verbal business presentations using correct English skills

- Exhibit ethical behavior, positive self-image, and professional conduct
- Develop a job search plan and appropriate documents and interview skills

Aviation Management – 60 Credits Associate of Applied Science Accelerated Degree

The Aviation Management Program is specifically designed to provide persons experienced in the aviation industry with the skills necessary to be successful in a position of leadership and to enhance their career mobility. This degree program is highly individualized based on each student's aviation industry experience and educational needs.

This program is structured to allow students to remain employed full-time while attending classes on a part-time basis. Supervisory Management (SMGT prefix) courses taken as part of the Aviation Management AAS Degree are delivered via accelerated methodology and will require commitment by the student to contribute a significant amount of time and effort outside of scheduled class times in study groups, class preparation, individual study, and applying relevant concepts on the job. Classes are scheduled two evenings each week and on occasional Saturdays. Upon approval, students may transfer in applicable transcripted course credits and/or experiential learning credits to satisfy required or elective program credits.

Students will have the opportunity to increase their skills in leadership, communications, team building, employee motivation, creative problem solving, performance management, coaching, managing priorities, building productive working relationships, project management, conducting effective meetings, and many more supervisory leadership techniques and tools.

Cored Supervisory Management Courses:
(Select 15 credits with advisor approval)

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
SMGT1400	Supervisory Leadership	3
SMGT1405	Strategies For Personal Leadership	3
SMGT1415	Leadership Development & Ethics	3
SMGT1425	Managing Time, Change & Stress	3
SMGT1455	Leadership Capstone Project	2
SMGT1505	Quality & Improvement	3
SMGT1515	Building & Leading Effective Work Teams	3
SMGT1525	Project Management	3
SMGT1535	Creative Problem Solving	3
SMGT1555	Quality Capstone Project	2
SMGT1605	Performance Management & Coaching	3
SMGT1615	Employment Law & Occupational Safety	3
SMGT1625	Budget Analysis & Cost Control	3
SMGT1635	Employee Training & Development	3
SMGT1655	Performance Improvement Capstone Project	2
SMGT1700	Personal Portfolio Design	1
SMGT1705	Accelerated Learning Concepts & Strategies	2

Minnesota Transfer Curriculum: Communications	3
Humanities	3
Social Sciences	3
Math/Science	3
Non-designated	3

Aviation Career Courses (30 credits):
 Documented Aviation Experiential Learning credits 1-30
 Approved aviation related technical elective courses 1-10
 (valid FAA A&P Certificate equivalent to 30 credits)

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Apply customer focused strategies
 - Demonstrate analytical skills in identifying and solving problems
 - Understand contemporary behavior and apply human relations skills
 - Develop and implement change strategies
 - Demonstrate leadership skills and identify approaches to motivation used to achieve a productive work environment
 - Apply marketing, management, and organizational theories in a supervisory setting
 - Apply human resources management practices
 - Plan, prepare and deliver effective oral and written communications
 - Demonstrate financial management skills
 - Utilize current technology
 - Apply strategies for customer focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
 - Demonstrate administrative management skills
 - Exercise creativity and innovation
 - Demonstrate interpersonal communication skills

**Business Administration – 63 Credits
Associate in Science Degree Program**

The Associate in Science in Business Administration program is designed to prepare students in general business administrations and management, enhance skills and competencies in current jobs and assist in career advancement opportunities. In addition, the A.S. degree program is designed to provide General Education Courses for students who intend to transfer into a baccalaureate program at a chosen four-year college. Specific transfer arrangements with the college of choice should be made as early in the degree as possible to ensure for appropriate program planning for enrollment at Lake Superior College. The program provides for electives in both liberal arts and business that allow students to customize their program to meet individual learning objectives, as well as fulfill varying requirements for transfer into a four-year bachelor's degree program at a chosen college. Students are advised to consult with a Business Advisor to ensure that selected courses will fulfill specific transfer requirements of the chosen transfer college.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ACCT1420	Intro to Financial Accounting (Accounting Majors)	3
ACCT2430	Managerial Accounting	
ADSC1420	Business Communications	3

ADSC1430	Integrated Office Software Applications I	3
ADSC1431	Integrated Office Software Applications II	3
BUS1600	Introduction to Business	3
BUS2500	Business Management Applications	3
ECON1150	Principles of Economics: Macroeconomics	3
ECON1160	Principles of Economics: Microeconomics	3
ECON2020	Statistics for Business and Economics I	3
ENGL1106	College Composition I	3
LGST1420	Business Law	3
MATH1110	Finite Mathematics	3
	OR	
MATH1120	Survey of Calculus	(3)
MKTG1421	Principles of Marketing	3
MKTG2770	Principles of Management and Supervision	3
COMM1105	Interpersonal Communication	3
	OR	
COMM1110	Methods of Public Speaking	(3)
	General Education (must be from Minnesota Transfer Curriculum)	18

Note: Total Requirement for General Education is 30 credits from any 6 categories of the Minnesota Transfer Curriculum

Program Outcomes

- This program is designed to provide students with the ability to:
- Apply effective business administration concepts and tools
 - Understand contemporary business strategies
 - Demonstrate analytical skills in identifying and solving problems
 - Apply marketing, management, and economic concepts in a business setting
 - Apply accounting principles and practices
 - Demonstrate financial management skills
 - Demonstrate administrative management skills
 - Demonstrate interpersonal communication skills
 - Plan, prepare, and deliver effective oral and written communications
 - Make business decisions in compliance with law
 - Create statistically reliable and valid data
 - Demonstrate understanding of statistical data for business decisions
 - Utilize effective software applications for business administration

**Business Information Specialist – 16 Credits
Certificate Program**

Choose 16 credits from the following Business Flex Lab Offerings:

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
BUS1801	Discovering Computers Level 1	1
BUS1802	Discovering Computers Level 2	1
BUS1811	Basic Keyboarding	1
BUS1821	MS Windows 98 Level 1	1
BUS1822	MS Windows 98 Level 2	1
BUS1831	MS Windows XP Level 1	1
BUS1832	MS Windows XP Level 2	1
BUS1851	MS Word 2000 Level 1	1
BUS1852	MS Word 2000 Level 2	1
BUS1853	MS Word 2000 Level 3	1

BUS1861	MS Word 2002 Level 1	1
BUS1862	MS Word 2002 Level 2	1
BUS1863	MS Word 2002 Level 3	1
BUS1881	MS Excel 2000 Level 1	1
BUS1882	MS Excel 2000 Level 2	1
BUS1883	MS Excel 2000 Level 3	1
BUS1891	MS Excel 2002 Level 1	1
BUS1892	MS Excel 2002 Level 2	1
BUS1893	MS Excel 2002 Level 3	1
BUS1911	MS PowerPoint 2000	1
BUS1921	MS PowerPoint 2002	1
BUS1941	MS Access 2000 Level 1	1
BUS1942	MS Access 2000 Level 2	1
BUS1943	MS Access 2000 Level 3	1
BUS1951	MS Access 2002 Level 1	1
BUS1952	MS Access 2002 Level 2	1
BUS1953	MS Access 2002 Level 3	1
BUS1971	MS FrontPage 2000	1
BUS1981	MS FrontPage 2002	1

**Health Insurance and Billing – 30 credits
Certificate Program**

The Health Insurance and Billing certificate program will prepare individuals to understand billing procedures, basic coding, insurance guidelines, medical terminology and regulatory changes affecting insurance billing and coding.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1415	Keyboarding I	4
ADSC1422	Business Vocabulary and Proofreading	1
ADSC1610	Medical Office Terminology	3
ADSC1611	Medical Office Procedures I	3
ADSC1612	Medical Office Procedures II	3
ADSC1614	Health Insurance and Billing	3
ADSC1616	CPT Coding	2
ADSC1621	Medical Office Anatomy and Physiology I	3
ADSC1622	Medical Office Anatomy and Physiology II	3
ADSC1635	Medical Office Diagnostic Coding	4
ADSC1425	Calculators/Ten-key	1

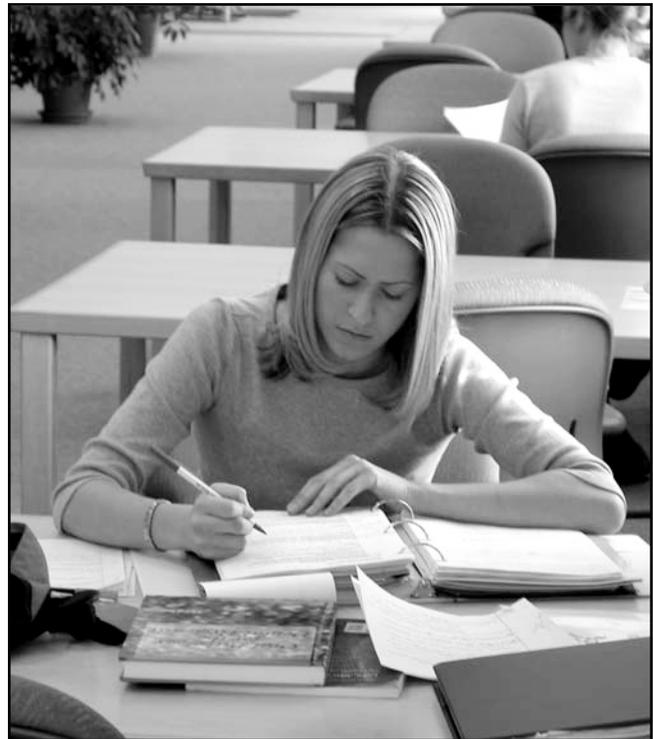
Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Receive medical claim forms
- Abstract medical information such as diagnosis, prognosis, and treatment dates from patient records
- Complete common insurance forms
- Follow the basic claims process for medical insurance and third party reimbursements
- Solve insurance billing problems
- Manually file claims (using the CPT manual)
- Trace delinquent claims
- Appeal denied claims
- Describe the importance of the confidential nature of medical reports
- Answer inquiries from doctors, patients, and insurance companies

**Human Resources Management – 10 credits
Certificate Program**

The Certificate in Human Resources Management is specifically designed to provide students currently employed in human resources administrative positions with knowledge and skills to qualify them for advancement



in the profession of human resources management. The technical areas of focus include benefits and pension administration, compensation administration, human resources information systems, and legal issues in human resources management. Students will attend classes evenings and weekends as part of a cohort group. Courses are scheduled and delivered through the LSC Technology Center.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
SMGT1680	Fundamentals of Human Resources	2
SMGT1682	Human Resources and the Law	2
SMGT1684	Wage and Salary Administration	1
SMGT1686	Employee Benefit Plans & Administration	1
SMGT1688	Pension Administration Fundamentals	1
SMGT1690	HR Information Systems & Technology	1

Approved Elective:

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
SMGT1600	Performance Management	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Apply customer focused strategies
- Demonstrate analytical skills in identifying and solving problems
- Understand contemporary behavior and apply human relations skills
- Apply human resources management practices
- Plan, prepare and deliver effective oral and written communications
- Utilize current technology
- Apply strategies for customer focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
- Demonstrate administrative management skills
- Demonstrate interpersonal communication skills

Information Processing Assistant – 35 Credits Diploma Program

This program is designed to prepare the student for employment as an Information Processing Assistant utilizing word processing skills. Information Processing Assistants perform a full range of office tasks. They may handle incoming and outgoing mail, type documents and forms, transcribe business documents from dictation, file and retrieve records, handle telephone calls, and make travel arrangements. They use a wide variety of office equipment including microcomputers, transcribing machines, calculators, and photocopiers.

Course #	Course Title	Credits
ADSC1415	Keyboarding I	4
ADSC1416	Keyboarding II	4
ADSC1420	Business Communications	3
ADSC1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1431	Integrated Office Software Apps II	3
ADSC1432	Office Capstone	2
ADSC1440	General Office Procedures	3
ADSC1441	Bookkeeping	2
ADSC1442	Records Management	2
ADSC1452	General Transcription	2
ADSC1715	Word Processing	2
ADSC1718	Keyboarding Drills	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Plan and produce professional written business correspondence using correct English and proofreading skills
- Plan and deliver verbal presentations using correct English skills
- Demonstrate keyboarding production proficiency
- Apply ARMA indexing and filing procedures and rules
- Transcribe various types of material into mailable documents using correct English skills
- Exhibit ethical behavior, positive self-image, and professional conduct
- Utilize computer productivity software for business applications
- Develop a job search plan, appropriate documents, and exhibit appropriate interview skills
- Apply learned program skills and knowledge to work or simulated situations
- Analyze and record business transactions, generate reports, and prepare financial statements

Legal Administrative Assistant – 66 Credits Associate in Applied Science Degree Program

This program is designed to prepare the student for employment as a Legal Administrative Assistant. The Legal Administrative Assistant may perform some of the same functions as a legal secretary: preparing legal correspondence and documents; meeting deadlines; public/client relations; timekeeping; gathering information from clients; and filing. In addition, legal administrative assistants may perform more complex tasks, assume coordinating and scheduling and/or supervisory activities, and assist in legal research.

Course #	Course Title	Credits
ADSC1415	Keyboarding I	4
ADSC1416	Keyboarding II	4

ADSC1420	Business Communications	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1442	Records Management	2
ADSC1452	General Transcription	2
ADSC1440	General Office Procedures	3
	OR	
ADSC1511	Law Office Procedures I	(3)
ADSC1512	Law Office Procedures II	4
	OR	
LGST 1400	Legal Studies I: Terminology, Procedures, And Documentation	(3)
	AND	
	Business Elective	1
ADSC1515	Law Office Applications	4
ADSC1520	Legal Keyboarding	2
ADSC1525	Legal Transcription/Word Proc. Apps.	2
ADSC1530	Law Office Capstone	1
ADSC1715	Word Processing	2
ADSC2520	Advanced Legal Practices	3
ADSC2597	Internship	3
	OR	
ADSC1517	Computers in the Law Office	(3)
LGST1420	Business Law	3
LGST1410	Legal Studies II: Research and Documentation Preparation	3

Minnesota Transfer Curriculum:

Social/Behavioral Science	3
Humanities (PHIL1130 recommended)	3
Communications (College Composition I & II)	6
General Ed. Electives	5

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate keyboarding production proficiency
- Perform general office tasks in the legal environment
- Apply ARMA indexing and filing procedures and rules
- Demonstrate proficiency in using a variety of computer software programs
- Transcribe material containing legal terminology into mailable documents using correct English skills
- Produce professional written business correspondence using correct English and proofreading skills
- Plan and deliver verbal business presentations using correct English skills
- Exhibit ethical behavior, positive self-image, and professional conduct
- Develop a job search plan, appropriate documents, and exhibit appropriate interview skills
- Exhibit advanced transcription and drafting abilities
- Assist in legal research tasks
- Apply learned skills and knowledge to work situations

Leadership – 14 Credits Accelerated Certificate Program

The Leadership Certificate is an individually available component of the Supervisory Management A.A.S. Degree program. It is specifically designed to provide employed students with the skills necessary to be successful in a position of supervisory leadership. Courses in the certificate program focus on skills and techniques directly related to supervisory leadership issues.

The Leadership Certificate Program is an accelerated program. Students entering the program commit to attending classes weekly following a preplanned sequence of courses and may complete their course work in one semester. Courses are scheduled "one at a time" in a recommended sequence meeting two evenings each week for three hours and for occasional Saturday sessions. Courses are offered in a highly interactive accelerated format, that reduces classroom time and increases outside class activities. Students are expected to contribute a significant amount of time and effort outside of the scheduled class time in study groups, class preparation, individual study, and applying relevant concepts on the job.

Students will have the opportunity to increase their skills in leadership, interpersonal skills, workplace ethics, managing change, resolving conflict, developing productive work relationships, and many more supervisory leadership related topics.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
SMGT1400	Supervisory Leadership	3
SMGT1405	Strategies For Personal Leadership	3
SMGT1415	Leadership Development & Ethics	3
SMGT1425	Managing Time, Change & Stress	3
SMGT1455	Leadership Capstone Project	2

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Apply customer focused strategies
 - Demonstrate analytical skills in identifying and solving problems
 - Understand contemporary behavior and apply human relations skills
 - Demonstrate leadership skills and identify approaches to motivation used to achieve a productive work environment
 - Apply marketing, management, and organizational theories in a supervisory setting
 - Plan, prepare and deliver effective oral and written communications
 - Utilize current technology
 - Apply strategies for customer-focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
 - Demonstrate administrative management skills
 - Demonstrate interpersonal communication skills

Legal Secretary – 18 Credits Certificate Program

This program is offered to students entering with general secretarial background and wishing to add a law office emphasis. Short-term training and flex-time options are available to those students who are maintaining a job and family obligations. Students entering with general office background, whether obtained through prior education or experience, do not need to spend the time and credits the full diploma requires. Placement in the field is strong and area attorneys regularly request qualified support staff.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1515	Law Office Applications	4
ADSC1517	Computers in the Law Office	3
ADSC1520	Legal Keyboarding	2
ADSC1525	Legal Transcription/Word Processing Applications	2

ADSC1530	Law Office Capstone	1
LGST1400	Legal Studies I: Terminology, Procedures And Documentation	3
LGST1410	Legal Studies II	3

Note: Courses available in flex lab setting (late afternoon/early evening two nights per week) with online options for most assignments. May be completed over one or more semesters, with Internship (ADSC2597) recommended if not employed upon completion.

Medical Administrative Secretary – 70 credits Associate in Applied Science Degree Program

This program is designed to prepare the student for employment as a Medical Administrative Secretary. The Medical Administrative Secretary performs many of the same functions as the medical secretary, but office supervisory activities become a major responsibility: coordinating and scheduling activities, applying the legalities of releasing information, policy interpretation, authorization, and purchasing. The secretary may also manage document storage and retrieval systems and utilize centralized computer systems.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1415	Keyboarding I	4
ADSC1416	Keyboarding II	4
ADSC1420	Business Communications	3
ADSC1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1442	Records Management	2
ADSC1610	Medical Office Terminology	3
ADSC1611	Medical Office Procedures I	3
ADSC1612	Medical Office Procedures II	3
ADSC1614	Health Insurance and Billing	3
ADSC1621	Medical Office Anatomy & Physiology I	3
ADSC1622	Medical Office Anatomy & Physiology II	3
ADSC1625	Medical Machine Transcription	4
ADSC1715	Word Processing	2
ADSC2695	Medical Secretary Capstone	1
ADSC2697	Medical Secretary Internship	3
MKTG2770	Principles of Mgmt & Supervision	3

Minnesota Transfer Curriculum:

Math/Science	3
Humanities (Ethics)	3
Communications (College Composition I)	3
Communications (Interpersonal Communications)	3
General Education Electives	6

Other Technical Credits:

Any ACCT, CIS, or ADSC course not already listed	1
--	---

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Plan and produce professional written business correspondence and medical correspondence using correct English and proofreading skills
 - Plan and deliver verbal presentations using correct English skills
 - Demonstrate keyboarding production proficiency

- Apply ARMA indexing and filing procedures and rules appropriate in a medical setting
- Transcribe mailable dictated medical reports and documents using correct medical transcription skills
- Demonstrate ability to correctly spell, define, and pronounce medical office terminology and/or abbreviations
- Demonstrate proficiency with drug reference books
- Demonstrate coordinating and supervisory responsibilities
- Utilize computer productivity software for business applications
- Integrate medical office tasks such as insurance, coding, banking, telephone techniques, billing, and scheduling of appointments
- Apply learned skills and knowledge from the Medical Administrative Secretary program in an actual medical setting
- Exhibit ethical behavior, a positive self-image, and professional conduct
- Develop a job search plan and prepare appropriate documents and exhibit appropriate interview skills

**Medical Receptionist – 30 Credits
Certificate Program**

This program is designed to prepare the student for employment as a Medical Receptionist. Medical Receptionists may be responsible for answering telephones, scheduling appointments, and preparing correspondence. Persons in this position need to know medical office terminology; must be familiar with hospital, clinic, and physician office health information procedures; and understand medical laws and ethics. In addition, the Medical Receptionist may be involved in handling release of information requests.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADCS1415	Keyboarding I	4
ADSC1420	Business Communications	3
ADCS1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1450	Machine Transcription	1
ADSC1610	Medical Office Terminology	3
ADSC1611	Medical Office Procedures I	3
ADSC1612	Medical Office Procedures II	3
ADSC1614	Health Insurance and Billing	3
ADSC1715	Word Processing	2
COMM1602	HR-Team-building in Career or Classroom	1

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Plan and produce professional written business correspondence and medical correspondence using correct English and proofreading skills
 - Plan and deliver verbal presentations using correct English skills
 - Demonstrate keyboarding production proficiency
 - Demonstrate ability to correctly spell, define, and pronounce medical office terminology and/or abbreviations
 - Utilize computer productivity software for business applications
 - Integrate medical office tasks such as insurance, coding, banking, telephone techniques, billing, and scheduling of appointments

- Apply learned skills and knowledge from the Medical Receptionist program in an actual or simulated medical setting
- Exhibit ethical behavior, a positive self-image, and professional conduct
- Develop a job search plan, prepare appropriate documents, and exhibit appropriate interview skills

**Medical Secretary – 40 Credits
Diploma Program**

The Medical Secretary transcribes dictation, prepares correspondence, records, and charts. Persons in this position need to know medical office terminology; be familiar with hospital, clinic, and laboratory procedures; and understand medical laws and ethics. In addition, the Medical Secretary may interact with patients, schedule appointments and meetings, work with patient files and records, and prepare insurance forms and billings.

A strong background in spelling, punctuation, grammar, and vocabulary is necessary to succeed in this program. Medical Secretaries must have fast and accurate typing skills, a good personal and professional working attitude, be detail oriented, organized, eager to learn, willing and able to assume responsibility, and must exercise initiative and good judgment. Students planning a Medical Secretarial career should complete as many high school business courses as possible or plan to spend the beginning term in general secretary and core courses, particularly keyboarding, communications, and math classes as needed.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADCS1415	Keyboarding I	4
ADSC1420	Business Communications	3
ADCS1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1610	Medical Office Terminology	3
ADSC1611	Medical Office Procedures I	3
ADSC1612	Medical Office Procedures II	3
ADSC1614	Health Insurance and Billing	3
ADSC1621	Medical Office Anatomy & Physiology I	3
ADSC1622	Medical Office Anatomy & Physiology II	3
ADSC1625	Medical Machine Transcription	4
ADSC1715	Word Processing	2
ADSC2695	Medical Secretary Capstone	1

Other Technical Credits:

Business Electives	1
--------------------	---

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Plan and produce professional written business correspondence and medical correspondence using correct English and proofreading skills
 - Plan and deliver verbal presentations using correct English skills
 - Demonstrate keyboarding production proficiency
 - Apply ARMA indexing and filing procedures and rules appropriate in a medical setting
 - Transcribe mailable dictated medical reports and documents using correct medical transcription skills
 - Demonstrate ability to correctly spell, define, and pronounce medical office terminology and/or abbreviations

- Demonstrate proficiency with drug reference books
- Utilize computer productivity software for business applications
- Integrate medical office tasks such as insurance, coding, banking, telephone techniques, billing, and scheduling of appointments
- Apply learned skills and knowledge from the Medical Secretary program in an actual or simulated medical setting
- Exhibit ethical behavior, a positive self-image, and professional conduct
- Develop a job search plan, prepare appropriate documents, and exhibit appropriate interview skills

**Medical Transcription – 30 credits
Certificate Program**

The Medical Transcription program prepares graduates for entry level positions in the field of medical transcription. An individual trained in medical transcription may pursue a career in a hospital setting, clinic, physician office, long term care setting, home health care, specialty settings or even in the home.

Courses consist of basic business courses such as computer keyboarding, word processing, business English, proofreading and communications. Technical courses include medical office terminology, anatomy and physiology. We enhance transcription skills through the completion of several hours of in-class assignments transcribing numerous documents. At Lake Superior College, we teach transcription using the tape system. This practicum provides realistic training in the field of Medical Transcription.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1415	Keyboarding I	4
ADSC1420	Business Communications	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1610	Medical Office Terminology	3
ADSC1611	Medical Office Procedures I	3
ADSC1612	Medical Office Procedures II	3
ADSC1621	Medical Office Anatomy & Physiology I	3
ADSC1622	Medical Office Anatomy & Physiology II	3
ADSC1625	Medical Machine Transcription	4
ADSC1715	Word Processing	2
ADSC1640	Keyboarding Drills/Medical Emphasis	1

Program Outcomes

- Plan and produce professional written business correspondence and medical correspondence using correct English and proofreading skills.
- Demonstrate keyboarding production proficiency.
- Transcribe mailable dictated medical reports and documents using correct medical transcription skills.
- Demonstrate ability to correctly spell, define, and pronounce medical office terminology and/or abbreviations.
- Demonstrate proficiency with drug reference books.
- Exhibit ethical behavior, a positive self-image, and professional conduct.



**Office Assistant – 28 Credits
Certificate Program**

This program is designed to prepare the student for employment as an Office Assistant. Office Assistants perform a wide variety of office tasks. Duties often required are keyboarding/typing business correspondence, reports, forms, and other material; filing and retrieving documents and records; sorting and distributing mail; and answering telephones. Persons in these positions may use microcomputers, transcribing machines, calculating machines, and photocopiers.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1415	Keyboarding I	4
ADSC1416	Keyboarding II	4
ADSC1420	Business Communications	3
ADSC1421	Business Presentations	3
ADSC1422	Business Vocabulary/Proofreading	1
ADSC1430	Integrated Office Software Apps I	3
ADSC1440	General Office Procedures	3
ADSC1441	Bookkeeping	2
ADSC1452	General Transcription	2
ADSC1715	Word Processing	2
ADSC1718	Keyboarding Drills	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Plan and produce professional written business correspondence using correct English and proofreading skills
- Plan and deliver verbal presentations using correct English skills
- Demonstrate keyboarding production proficiency
- Apply ARMA indexing and filing procedures and rules
- Transcribe various types of material into mailable documents using correct English skills
- Exhibit ethical behavior, positive self-image, and professional conduct
- Utilize computer productivity software for business applications
- Develop a job search plan, appropriate documents, and exhibit appropriate interview skills
- Analyze and record business transactions, generate reports, and prepare financial statements

Paralegal Studies – 64 Credits

Associate in Science Degree Program

This program is designed to prepare students for transfer to a four-year institution in the legal field. A legal assistant or paralegal is a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency, or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. The American Bar Association states that the terms legal assistant and paralegal are used interchangeably. Paralegals may not give legal advice or otherwise engage in the unauthorized practice of law.

Paralegal work includes developing and modifying procedures used in the legal field, preparing routine legal documents, assisting in the preparation of cases for trial, investigating facts, researching, selecting, assessing, compiling, and using information from the law library and other references, and analyzing and handling procedural problems. Legal assistants may be employed by law firms, businesses, financial institutions, and title and escrow companies, or government agencies. Additional positions for which they may qualify include title examiner, trust officer, contract clerk, legal investigator, and law firm administrator.

Course #	Course Title	Credits
LGST1400	Legal Studies I: Terminology, Procedures, and Documentation	3
LGST1410	Legal Studies II: Research and Document Preparation	3
LGST1415	Legal Ethics	3
LGST1420	Introduction to Business Law	3
LGST1430	Advanced Legal Research	3

Elective Legal Studies Courses: Choose 9 credits of the following courses:

LGST1425	Advanced Business Law Topics	3
LGST1440	Constitutional Law	3
LGST1450	Contract Law	3
LGST1460	Criminal Law	3
LGST1470	Wills, Trusts, and Probate	3
LGST1480	Family Law	3
LGST1490	Alternative Dispute Resolution: Mediation	3
LGST1500	Victim Advocacy	3
LGST1510	Bankruptcy Law	3
LGST 1520	Real Property	3
LGST 1530	Torts and Personal Injury	3
SOC1114	Introduction to Criminal Justice	3
SOC1120	Criminal Trials	3

Elective Business Courses: Choose 9 credits of any LGST, ADSC, ACCT, or CIS courses, including the following:

ADSC 1420	Business Communications	3
ADSC 1430	Integrated Office Software I	3
ADSC 1431	Integrated Office Software II	3
ADSC 1441	Bookkeeping	2
ADSC 1517	Computers in the Law Office	2
ADSC 1579	Presentation Software (MS PowerPoint)	2
ADSC 2597	Law Office Internship	3
ADSC1530	Law Office Capstone	1

General Education Requirements: Select 30 credits from 6 of 10 goal areas of the Minnesota Transfer Curriculum. The following courses are required and satisfy one of the

Minnesota Transfer Curriculum goal areas:		
ENGL 1106	College Composition I	3
ENGL 1109	College Composition II	3

Program Outcomes:

Graduates will be able to demonstrate knowledge of legal terminology and analyze the history of the American legal system; demonstrate knowledge of court rules and procedures; understand attorney and paralegal ethics; demonstrate proper methods for conducting legal interviews and investigations; distinguish statutory law and case law; demonstrate the proper way to conduct legal research; prepare legal documents; classify the basic elements of and prepare an appellate brief; describe legal rights and duties of businesses; describe government regulation and the legal environment in which businesses operate; describe business organizations; describe and analyze varying types of legal research; locate legal information; and, depending on the electives chosen, demonstrate knowledge of the various elements and procedures associated with constitutional, contract, criminal, family, and bankruptcy law; understand and demonstrate fluency in elements associated with estate planning, victim advocacy, or alternative dispute resolution.

Paralegal Studies – 64 Credits

Associate in Applied Science Degree Program

This program is designed to prepare students for paraprofessional positions in the legal field. A legal assistant or paralegal is a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency, or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. The American Bar Association states that the terms legal assistant and paralegal are used interchangeably. Paralegals may not give legal advice or otherwise engage in the unauthorized practice of law.

Paralegal work includes developing and modifying procedures used in the legal field, preparing routine legal documents, assisting in the preparation of cases for trial, investigating facts, researching, selecting, assessing, compiling, and using information from the law library and other references, and analyzing and handling procedural problems. Legal assistants may be employed by law firms, businesses, financial institutions, and title and escrow companies, or government agencies. Additional positions for which they may qualify include title examiner, trust officer, contract clerk, legal investigator, and law firm administrator.

Course #	Course Title	Credits
LGST1400	Legal Studies I: Terminology, Procedures, and Documentation	3
LGST1410	Legal Studies II: Research and Document Preparation	3
LGST1415	Legal Ethics	3
LGST1420	Introduction to Business Law	3
LGST1430	Advanced Legal Research	3

Elective Legal Studies Courses: Choose 9 credits of the following courses:

LGST1425	Advanced Business Law Topics	3
LGST1440	Constitutional Law	3
LGST1450	Contract Law	3
LGST1460	Criminal Law	3
LGST1470	Wills, Trusts, and Probate	3

LGST1480	Family Law	3
LGST1490	Alternative Dispute Resolution: Mediation	3
LGST1500	Victim Advocacy	3
LGST1510	Bankruptcy Law	3
LGST 1520	Real Property	3
LGST 1530	Torts and Personal Injury	3
SOC1114	Introduction to Criminal Justice	3
SOC1120	Criminal Trials	3

Elective Business Courses: Choose 24 credits of any LGST, ADSC, ACCT, or CIS courses, including the following:

ADSC 1420	Business Communications	3
ADSC 1430	Integrated MS Office Software I	3
ADSC 1431	Integrated MS Office Software II	3
ADSC 1441	Bookkeeping	2
ADSC 1517	Computers in the Law Office	2
ADSC 1715	Word Processing	2
ADSC 1719	Presentation Software (MS PowerPoint)	2
ADSC 2597	Law Office Internship OR	3
ADSC1530	Law Office Capstone	1

General Education Requirements: Select 30 credits from 6 of 10 goal areas of the Minnesota Transfer Curriculum.

The following courses are required and satisfy one of the Minnesota Transfer Curriculum goal areas:

ENGL 1106	College Composition I	3
ENGL 1109	College Composition II	3

Program Outcomes:

Graduates will be able to demonstrate knowledge of legal terminology and analyze the history of the American legal system; demonstrate knowledge of court rules and procedures; understand attorney and paralegal ethics; demonstrate proper methods for conducting legal interviews and investigations; distinguish statutory law and case law; demonstrate the proper way to conduct legal research; prepare legal documents; classify the basic elements of and prepare an appellate brief; describe legal rights and duties of businesses; describe government regulation and the legal environment in which businesses operate; describe business organizations; describe and analyze varying types of legal research; locate legal information; and, depending on the electives chosen, demonstrate knowledge of the various elements and procedures associated with constitutional, contract, criminal, family, and bankruptcy law; understand and demonstrate fluency in elements associated with estate planning, victim advocacy, or alternative dispute resolution.

**Paralegal Studies –30 credits
Certificate Program**

This program is designed to prepare students for paraprofessional positions in the legal field. A legal assistant or paralegal is a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency, or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. The American Bar Association states that the terms legal assistant and paralegal are used interchangeably. Paralegals may not give legal advice or otherwise engage in the unauthorized practice of law.

Paralegal work includes developing and modifying procedures used in the legal field, preparing routine legal documents, assisting in the preparation of cases for trial, investigating facts, researching, selecting, assessing, compiling, and using information from the law library and other references, and analyzing and handling procedural problems. Legal assistants may be employed by law firms, businesses, financial institutions, and title and escrow companies, or government agencies. Additional positions for which they may qualify include title examiner, trust officer, contract clerk, legal investigator, and law firm administrator.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
LGST1400	Legal Studies I: Terminology, Procedures, and Documentation	3
LGST1410	Legal Studies II: Research and Document Preparation	3
LGST1415	Legal Ethics	3
LGST1420	Introduction to Business Law	3
LGST1430	Advanced Legal Research	3

Elective Legal Studies Courses: Choose 6 credits of the following courses:

LGST 1425	Advanced Business Law Topics	3
LGST 1440	Constitutional Law	3
LGST 1450	Contract Law	3
LGST 1460	Criminal Law	3
LGST 1470	Wills, Trusts, and Probate	3
LGST 1480	Family Law	3
LGST 1490	Alternative Dispute Resolution: Mediation	3
LGST 1500	Victim Advocacy	3
LGST 1510	Bankruptcy Law	3
LGST 1520	Real Property	3
LGST 1530	Torts and Personal Injury	3
SOC 1114	Introduction to Criminal Justice	3
SOC 1120	Criminal Trials	3

Elective Business Courses: Choose 9 credits of any LGST, ADSC, ACCT, or CIS courses, including the following:

ADSC 1420	Business Communications	3
ADSC 1430	Integrated MS Office Software I	3
ADSC 1431	Integrated MS Office Software II	3
ADSC 1441	Bookkeeping	2
ADSC 1517	Computers in the Law Office	2
ADSC 1719	Presentation Software (MS PowerPoint)	2
ADSC 2597	Law Office Internship	3
ADSC1530	Law Office Capstone	

Program Outcomes:

Graduates will be able to demonstrate knowledge of legal terminology and analyze the history of the American legal system; demonstrate knowledge of court rules and procedures; understand attorney and paralegal ethics; demonstrate proper methods for conducting legal interviews and investigations; distinguish statutory law and case law; demonstrate the proper way to conduct legal research; prepare legal documents; classify the basic elements of and prepare an appellate brief; describe legal rights and duties of businesses; describe government regulation and the legal environment in which businesses operate; describe business organizations; describe and analyze varying types of legal research; locate legal information; and, depending on the electives chosen, demonstrate knowledge of the various elements and procedures associated with constitutional, contract, criminal, family, and bankruptcy law; under-

stand and demonstrate fluency in elements associated with estate planning, victim advocacy, or alternative dispute resolution.

**Performance Improvement – 14 Credits
Accelerated Certificate Program**

The Performance Improvement Certificate is an individually available component of the Supervisory Management A.A.S. Degree program. It is specifically designed to provide employed students with the skills necessary to be successful in a position of supervisory leadership. Courses in the certificate program focus on skills and techniques directly related to human resource development issues.

The Human Resource Development Program is an accelerated program. Students entering the program commit to attending classes weekly following a preplanned sequence of courses and may complete their course work in one semester. Courses are scheduled "one at a time" in a recommended sequence meeting two evenings each week for three hours and for occasional Saturday sessions. Courses are offered in a highly interactive accelerated format that reduces classroom time and increases outside class activities. Students are expected to contribute a significant amount of time and effort outside of the scheduled class time in study groups, class preparation, individual study, and applying relevant concepts on the job.

Students will have the opportunity to increase their skills in performance management, coaching, managing diversity, employee selection and training, managing workplace stress, safety, and many more human resource development related topics.

Course #	Course Title	Credits
SMGT1605	Performance Management & Coaching	3
SMGT1615	Employment Law & Occupational Safety	3
SMGT1625	Budget Analysis & Cost Control	3
SMGT1635	Employee Training & Development	3
SMGT1655	Performance Improvement Capstone Project	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Apply customer-focused strategies
- Demonstrate analytical skills in identifying and solving problems
- Understand contemporary behavior and apply human relations skills
- Develop and implement change strategies
- Demonstrate leadership skills and identify approaches to motivation used to achieve a productive work environment
- Apply human resources management practices
- Plan, prepare and deliver effective oral and written communications
- Utilize current technology
- Apply strategies for customer focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
- Demonstrate administrative management skills
- Demonstrate interpersonal communication skills

**Professional Bookkeeper – 30 Credits
Certificate Program**

The Professional Bookkeeper certificate is a one-year program designed to prepare the candidate for a career in the bookkeeping and accounting fields. This program emphasizes the double entry accounting system, federal income taxation, payroll taxation, computerized accounting systems, and other computerized business applications. Upon completion of the certificate, the student should be well prepared to sit for the Certified Bookkeeper exam. This comprehensive examination is administered by the American Institute of Professional Bookkeepers. Sitting for this professional exam is highly recommended, but not a requirement of the LSC program.

Course #	Course Title	Credits
ACCT1400	Accounting Math	2
ACCT1420	Intro to Financial Accounting (Accounting Majors)	3
ACCT1500	Personal Finance	3
ACCT1520	Accounting Principles & Concepts	3
ACCT1530	Payroll Accounting	3
ACCT1550	Tax Accounting I	3
ACCT2410	Spreadsheet Concepts & Applications for Accounting	2
ACCT2430	Managerial Accounting	3
ACCT2460	Computerized Apps in Accounting	2
ADSC1420	Business Communications	3
ADSC1430	Integrated Software Apps I	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Successfully complete a comprehensive problem requiring the preparation of the basic financial statements
- Successfully complete a comprehensive problem requiring the preparation of an individual income tax return
- Successfully complete a comprehensive problem requiring all of the steps of the accounting cycle, using general ledger software

**Quality – 14 Credits
Accelerated Certificate Program**

The Quality Certificate is an individually available component of the Supervisory Management A.A.S. Degree program. It is specifically designed to provide employed students with the skills necessary to be successful in a position of supervisory leadership. Courses in the certificate program focus on skills and techniques directly related to quality issues.

The Quality Certificate Program is an accelerated program. Students entering the program commit to attending classes weekly following a preplanned sequence of courses and may complete their course work in one semester. Courses are scheduled "one at a time" in a recommended sequence meeting two evenings each week for three hours and for occasional Saturday sessions. Courses are offered in a highly interactive accelerated format that reduces classroom time and increases outside class activities. Students are expected to contribute a significant amount of time and effort outside of the scheduled class time in study groups, class preparation, individual study, and applying relevant concepts on the job.



Students will have the opportunity to increase their skills in continuous improvement strategies and tools, creative problem solving, work teams, project and meeting management, customer service, managing priorities, and many more quality related topics.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
SMGT1505	Quality & Improvement	3
SMGT1515	Building & Leading Effective Work Teams	3
SMGT1525	Project Management	3
SMGT1535	Creative Problem Solving	3
SMGT1555	Quality Capstone Project	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Apply customer-focused strategies
- Demonstrate analytical skills in identifying and solving problems
- Plan, prepare and deliver effective oral and written communications
- Utilize current technology
- Apply strategies for customer-focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
- Demonstrate administrative management skills
- Exercise creativity and innovation
- Demonstrate interpersonal communication skills

**Sales and Marketing – 64 Credits
Associate in Applied Science Degree Program**

The Sales and Marketing Associate of Applied Science Degree program combines technical sales and marketing related courses with liberal education courses, offering the graduate an excellent foundation for entry-level and advanced level employment in the sales and marketing fields. Students have the opportunity to participate in an internship related to their occupation goals. Also, membership in Delta Epsilon Chi (DEX), a national association of collegiate marketing students, is available through LSC's chapter.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ACCT1520	Financial Accounting: Double Entry	3
ADSC1420	Business Communications**	3
ADSC1421	Business Presentations**	3

ADSC1430	Integrated Office Software Applications I	3
ECON1150	Principles of Macroeconomics	3
ENGL1106	College Composition I	3
LGST1420	Business Law	3
MKTG1411	Sales Techniques & Applications	4
MKTG1421	Principles of Marketing	3
MKTG1431	Marketing Financial Techniques	3
MKTG1512	Consultative & Negotiation Selling Techniques**	3
MKTG2422	Marketing Applications**	3
MKTG2626	Retail Principles & Management	3
MKTG2760	Advertising/Sales Promotion**	3
MKTG2770	Principles of Mgmt & Supervision	3
MKTG2797	Internship**	4
COMM1602	HR-Team-building in Career or Classroom	1

Technical Electives 3

Minnesota Transfer Curriculum:

Non-designated 10

**Courses that require prerequisites and/or instructor's consent.

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Complete required transaction selling presentations using appropriate techniques, behaviors, and skills
- Complete required consultative and negotiation selling presentations using appropriate techniques, behaviors, and skills
- Create a comprehensive marketing plan using appropriate marketing techniques within the given parameters
- Create an advertising/promotion plan within the guidelines given
- Participate in professional communities
- Complete a personal resume to acceptable standards
- Implement required technology to appropriate standards
- Complete oral presentations to acceptable standards

**Sales and Marketing – 60 Credits
Diploma Program**

Students enrolled in the Sales and Marketing Diploma program prepare for related employment in a variety of businesses which utilize sales and marketing efforts. A concentration or emphasis can be added to the core program through electives in specialty areas that the student and advisor may determine appropriate. Membership in Delta Epsilon Chi (DEX), a national association of collegiate marketing students, is available to LSC's students that are interested in marketing.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ACCT1500	Personal Finance	3
ACCT1520	Financial Accounting: Double Entry	3
ADSC1420	Business Communications**	3
ADSC1421	Business Presentations**	3
ADSC1430	Integrated Office Software Applications I	3
LGST1420	Business Law	3
MKTG1411	Sales Techniques & Applications	4
MKTG1421	Principles of Marketing	3
MKTG1431	Marketing Financial Techniques	3
MKTG1512	Consultative & Negotiation Selling Techniques	3

MKTG2422	Marketing Applications**	3
MKTG2626	Retail Principles & Management	3
MKTG2653	Sales Management**	3
MKTG2760	Advertising/Sales Promotion**	3
MKTG2770	Principles of Mgmt & Supervision	3
MKTG2797	Sales and Marketing Internship**	4
COMM1601	HR-The Individual in Career or Classroom	1
COMM1602	HR-Team-building in Career or Classroom	1

**Courses that require prerequisites and/or instructor's consent.

Other Technical Credits:
 Technical Electives 8

Program Outcomes
 The program is designed to provide students with the knowledge and ability to:

- Complete required transaction selling presentations using appropriate techniques, behaviors, and skills
- Complete required consultative and negotiation selling presentations using appropriate techniques, behaviors, and skills
- Create a comprehensive marketing plan using appropriate marketing techniques within the given parameters
- Create an advertising/promotion plan within the guidelines given
- Participate in professional communities
- Complete a personal resume to acceptable standards
- Implement required technology to appropriate standards
- Complete oral presentations to acceptable standards

**Sales Representative – 33 credits
 Diploma Program**

Course #	Course Title	Credits
ADSC1420	Business Communications	3
ADSC1420	Business Presentations	3
ADSC1430	Integrated Office Software Applications I	3
COMM1601	Human Relations-The Individual in Career or Classroom	1
COMM1602	Human Relations – Team-building in Career or Classroom	1
LGST1420	Business Law	3
MKTG1411	Sales Techniques and Applications	4
MKTG1421	Principles of Marketing	3
MKTG1431	Marketing Financial Techniques	3
MKTG1512	Consultative and Negotiation Selling Techniques*	3
MKTG2422	Marketing Applications*	3
MKTG2760	Advertising/Sales Promotion	3

* Courses that require prerequisites and/or instructor approval

**Supervisory Management – 60 Credits
 Associate in Applied Science Accelerated Degree Program**

The Supervisory Management AAS Accelerated Degree program is designed to provide working adults with the skills necessary to be successful in a position of supervisory leadership. Businesses and organizations today require high levels of supervisory and leadership competency. Graduates of the program can benefit by becoming qualified for advancement into a supervisory position, enhanc-

ing current skills for persons who are already supervising others, or for promotion into a position of greater leadership responsibility and influence.

The Supervisory Management AAS Degree Program is an accelerated program. Students entering the program commit to attending classes weekly following a preplanned sequence of courses and may complete their course work in two years. Courses are scheduled "one at a time" in a recommended sequence meeting two evenings each week for three hours and for occasional Saturday sessions. Courses are offered in a highly interactive accelerated format that reduces classroom time and increases outside class activities. Students are expected to contribute a significant amount of time and effort outside of the scheduled class time in study groups, class preparation, individual study, and applying relevant concepts on the job. Completion time for the program can be reduced if applicable college credits are available to be transferred from accredited sources.

The Supervisory Management AAS Accelerated Degree is awarded to students who successfully complete the Supervisory Leadership Certificate, Quality Certificate, Performance Improvement Certificate, and required general education courses.

Students will have the opportunity to increase their skills in leadership, communications, team building, quality, managing change, employee motivation, creative problem solving, performance management, coaching, managing priorities, building productive working relationships, project management, conducting effective meetings, and many more supervisory leadership techniques and tools.

General education courses are not included in the accelerated format and are not, therefore, included in the sequence of courses. In order to graduate in two years, general education courses need to be taken concurrent with the program courses.

Course #	Course Title	Credits
SMGT1400	Supervisory Leadership	3
SMGT1405	Strategies For Personal Leadership	3
SMGT1415	Leadership Development & Ethics	3
SMGT1425	Managing Time, Change & Stress	3
SMGT1455	Leadership Capstone Project	2
SMGT1505	Quality & Improvement	3
SMGT1515	Building & Leading Effective Work Teams	3
SMGT1525	Project Management	3
SMGT1535	Creative Problem Solving	3
SMGT1555	Quality Capstone Project	2
SMGT1605	Performance Management & Coaching	3
SMGT1615	Employment Law & Occupational Safety	3
SMGT1625	Budget Analysis & Cost Control	3
SMGT1635	Employee Training & Development	3
SMGT1655	Performance Improvement Capstone Project	2
SMGT1700	Personal Portfolio Design	1
SMGT1705	Accelerated Learning Concepts & Strategies	2

Minnesota Transfer Curriculum:
 Communications 3

Humanities	3
Social Sciences	3
Math/Science	3
Non-designated	3

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Apply customer-focused strategies
 - Demonstrate analytical skills in identifying and solving problems
 - Understand contemporary behavior and apply human relations skills
 - Develop and implement change strategies
 - Demonstrate leadership skills and identify approaches to motivation used to achieve a productive work environment
 - Apply marketing, management, and organizational theories in a supervisory setting
 - Apply human resources management practices
 - Plan, prepare and deliver effective oral and written communications
 - Demonstrate financial management skills
 - Utilize current technology
 - Apply strategies for customer-focused decisions to individual supervisory responsibilities affecting service, quality, and productivity
 - Demonstrate administrative management skills
 - Exercise creativity and innovation
 - Demonstrate interpersonal communication skills

Computer Careers

Computer Careers Program Prerequisites

- (Applies to all degree, diploma and certificate programs):
- Appropriate placement test score or concurrent enrollment in ENGL0460.
 - Appropriate placement test score or concurrent enrollment in READ0460.
 - Appropriate placement test score or concurrent enrollment in MATH 0470.
 - Keyboarding skills of 20 wpm with 2 or less errors or passing grade in ADSC1710 or ADSC1711.

Business and Technology – 61 Credits Associate in Science Degree Program

This program will prepare students for advanced study in fields of information and computer technology. Learning goals include: understanding computer technology and industries; understanding the impact of computer technology on society; understanding the systems life cycle and software design concepts and practices; and understanding theoretical concepts of computer sciences.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
Business Core:		
ACCT1400	Accounting Math	2
ACCT1520	Introduction to Financial Accounting	3
ADSC1420	Business Communications	3
LGST1420	Business Law	3

Technical Electives (choose from ACCT, ADSC, MKTG, or SMGT) 3

Technical Core:		
CIS 1521	Microcomputer Operating Systems	3
ELTN2465	A+ PC Service and Support	3

CIS Technical Electives		
(choose from ACCT, ADSC, MKTG, or SMGT)		
CIS 1406	Web Programming	2
CIS 1407	Introduction to FrontPage	2
CIS 1415	Introduction to Programming Principles	4
CIS 1510	Microcomputer Database	2
CIS 1515	Microcomputer Spreadsheets	2

General Education Courses (Minnesota Transfer Curriculum):		
COMM1105	Interpersonal Communications	3
ENGL1106	College Composition I	3
ENGL1109	College Composition II	3
MATH1100	College Algebra	4
PSYC1120	General Psychology	3
SOC1111	Introduction to Sociology	3
Select a minimum of one course from each of the goal areas listed below:		
Natural Sciences, History, Humanities & Fine Arts		12

Program Outcomes

- This is a transfer degree, intended to prepare students to continue their studies at a baccalaureate institution.

CISCO Certified Network Associate – 18 Credits Certificate Program

This program prepares students for the exam needed to obtain a Cisco Certified Network Associate (CCNA) certification. Students will gain theoretical understanding of networking principles, and get hands-on experience using Cisco routers and switches. Through the use of Cisco Networking Academy course materials, students will learn how to plan, implement, and manage local and wide-area networks.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
CIS1521	Microcomputer Operating Systems	3
CIS1946	CISCO Networking I	3
CIS1947	CISCO Networking II	3
CIS1948	CISCO Networking III	3
CIS1949	CISCO Networking IV	3
ELTN2465	PC Service Support	3

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Describe the OSI Reference Model, layered communications principles, and routing, bridging and switching principles and devices, and use these concepts effectively in verbal and written communication
 - Manage Cisco router hardware and the Cisco Internet Operating System (IOS), including planning, installation, configuration, management, upgrading and troubleshooting of routers and switches
 - Analyze organizational networking needs, and design and implement Local-Area and Wide-Area Networks (LANs and WANs), including hardware and software configuration and management, and security (access control)
 - Use project management methodologies to plan, cost, and implement network systems



Computer Literacy, PC Technician – 15 Credits Certificate Program

The Computer Literacy, PC Technician Certificate Program is designed to prepare participants with foundation level skills to help them determine whether a job in the computer field would be a good career choice. Completion of the program should also prepare the student for an entry-level job in the field of PC repair. The 15-credit certificate can easily be extended into any of the following 30-credit certificate programs: Computer Programming, Help Desk Analyst, or Web Developer.

Course #	Course Title	Credits
CIS1521	Microcomputer Operating Systems	3
ELTN2465	PC Service & Support	3
CIS Technical Electives		9
Technical Electives (choose 9 credits from the following):		
CIS1406	Web Programming w/HTML	3
CIS1407	Introduction to FrontPage	2
CIS1415	Introduction to Programming Principles	4
CIS1510	Microcomputer Database	3
CIS1515	Microcomputer Spreadsheets	3
CIS1946	CISCO Networking I	3
CIS1947	CISCO Networking II	3

Program Outcome
 -Install and troubleshoot hardware and operating systems components successfully

Computer Technology – 61 Credits Associate in Science Degree

This program will prepare students for advanced study in fields of information and computer technology. Learning goals include: understanding computer technology and industries; understanding the impact of computer technology on society; understanding the systems life cycle and software design concepts and practices; and understanding theoretical concepts of computer sciences.

Course #	Course Title	Credits
Computer Technology Core:		30
Help Desk Analyst Certificate (30 credits)		
OR		
Web Developer, Certificate (30 credits)		
OR		
Computer Programmer Certificate (30 credits)		
OR		
Computer Networking Certificate (28 credits)		
General Education Courses (Minnesota Transfer Curriculum):		31
ENGL1106	College Composition I	3
ENGL1109	College Composition II	3
MATH1100	College Algebra	4
PSYC1120	General Psychology	3
SOC1111	Introduction to Sociology	3
COMM1105	Interpersonal Communications	3
Select a minimum of one course from each of the goal areas listed below:		
Natural Sciences, History, Humanities & Fine Arts		12

Program Outcomes
 - This is a transfer degree, intended to prepare students to continue their studies at a baccalaureate institution.

Information Systems Programmer – 48 Credits Diploma Program

This program offers skills development in computer applications, database management, system analysis and design, and data communications. Students learn to design, write, test, document, and implement computer programs. Programming is taught in both the mainframe and microcomputer environment with students choosing the environment in which they would like to develop programming skills.

Course #	Course Title	Credits
CIS1406	Web Programming	3
CIS1415	Introduction to Programming Principles	4
CIS1510	Microcomputer Database	3
CIS 1519	Survey of Operating Systems	3
CIS1441	Mini/Mainframe Operating Systems I	3
CIS16xx	Beginning Programming Language	4
CIS26xx	Advanced Programming Language	4
CIS2730	Database Management	4
CIS16xx	Beginning Programming Language	4
CIS26xx	Advanced Programming Language	4
CIS2740	Systems Analysis and Design	4
CIS2742	Applications Programming	2
CIS2980	Internship	2

Technical Electives		8
CIS 1408	Dynamic HTML/XML	3
CIS 1410	Web Site Design	3
CIS 1412	Web Design Graphics and Animation	4
CIX 16xx	Any CIS 1600 series course	
CIS 2540	Management Information Systems Applications	4
CIS 26xx	Any CIS 2600 series course	
CIS 2745	Network Administration: UNIX	3
CIS 2980	Internship	1-3
CIS 2999	Special Topics in Computer Science	1-7

Program Outcomes

- Install and troubleshoot hardware and operating systems components successfully
- Using a semester II advanced programming language, student will be able to use good programming techniques to automate a business process.
- Using a semester III advanced programming language (different from semester II), student will be able to use good programming techniques to automate a business process.
- Student will be able to use problem solving techniques to create a computer program or programs to solve business problems.

Information Systems Programmer – 64 Credits Associate in Applied Science Program

This program offers skills development in computer applications, database management, system analysis and design, and data communications. Students learn to design, write, test, document, and implement computer programs.

Programming is taught in both the mainframe and micro-computer environment with students choosing the environment in which they would like to develop programming skills.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS 1406	Web Programming	3
CIS1510	Microcomputer Database I	3
CIS1511	Microcomputer Database II	2
CIS 1519	Survey of Operating Systems	3
CIS16xx	Beginning Programming Language	4
CIS26xx	Advanced Programming Language	4
CIS2730	Database Management	4
CIS16xx	Beginning Programming Language	4
CIS26xx	Advanced Programming Language	4
CIS2740	Systems Analysis and Design	4
CIS2742	Applications Programming	2
CIS2980	Internship	1-3
MATH1100	College Algebra	4
	OR	
MATH1115	Contemporary Discrete Mathematics	(4)
Technical Electives		8
CIS 1408	Dynamic HTML/XML	3
CIS 1410	Web Site Design	3
CIS 1412	Web Design Graphics and Animation	4
CIX 16xx	Any CIS 1600 series course	
CIS 2540	Management Information Systems Applications	4
CIS 26xx	Any CIS 2600 series course	
CIS 2745	Network Administration: UNIX	3
CIS 2980	Internship	1-3
CIS 2999	Special Topics in Computer Information Systems	1-7
Communications		3
Social/Behavioral Sciences		3
Humanities		3
General Education		3
Minnesota Transfer Curriculum:		
Select at least one course from the following:		
ENGL1106	College Composition I	3
COMM1105	Interpersonal Communication	3
COMM1110	Methods of Public Speaking	3
MATH1100	College Algebra	4

Select at least one course from the following:

ECON1150	Principles of Economics: Macroeconomics	3
ECON1160	Principles of Economics: Microeconomics	3
PSYC1120	General Psychology	3
PSYC1135	Human Development	3
SOC1111	Introduction to Sociology	3

Select at least one course from the following:

ENGL1109	College Composition II	3
PHIL1125	Logic	3
PHIL1130	Ethics	3
PHIL1140	Critical Thinking	3

General Education – other:

Select from Communication, Mathematical/Logical Reasoning, History and the Social and Behavioral Sciences, or Humanities and Fine Arts	3
--	---

Program Outcomes

- Install and troubleshoot hardware and operating systems components successfully
- Using a semester II advanced programming language, student will be able to use good programming techniques to automate a business process.
- Using a semester III advanced programming language (different from semester II), student will be able to use good programming techniques to automate a business process.
- Student will be able to use problem solving techniques to create a computer program or programs to solve business problems.

IT Specialist: Network Administration Computer Networking – 30 Credits Certificate Program

The Computer Networking Certificate Program is designed to prepare participants with foundation level skills for a job in computer networking. The curriculum in this program will help prepare you for the following professional certifications: A+, Network+, CNA, CCNA, and MCP. The 28-credit certificate can easily be extended into either the 48-credit Professional Computer Networking Diploma or 64-credit Professional.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1521	Microcomputer Operating Systems	3
CIS2745	Network Administration: UNIX	3
CIS1946	CISCO Networking I	3
CIS1947	CISCO Networking II	3
CIS1948	CISCO Networking III	3
CIS1949	CISCO Networking IV	3
CIS2950	Network Administration: Windows Client	3
ELTN2465	PC Service and Support	3

Technical Electives

CIS1560	Web Server Administration	3
CIS2510	Help Desk Methods	2
CIS2515	Help Desk Lab	2
CIS2845	Network Administration: Advanced UNIX	3

IT Specialist: Network Administration (MCSA/CCNA) – 48 Credits

Diploma Program

This program trains students to provide technical support necessary for computer networks in a business environment. Skill development includes the fundamentals of data processing, data communications, network protocol, hardware, and operating systems. Hardware skills include selection, installation, configuration, repair, and maintenance of computer and data communications equipment. Operating systems may include the most current versions of DOS, Windows, UNIX, and Novell. Areas of knowledge also will encompass client/server architecture, Local Area Networks (LANs), and Wide Area Networks (WANs). This program is designed to prepare students for certifications such as Novell's CAN, Microsoft's MCP and MCSA, CISCO's CCNA, and Comp TIA's A+ and Network+.

Course #	Course Title	Credits
CIS1521	Microcomputer Operating Systems	3
CIS2745	Network Administration: UNIX	3
CIS1946	CISCO Networking I	3
CIS1947	CISCO Networking II	3
CIS1948	CISCO Networking III	3
CIS1949	CISCO Networking IV	3
CIS2810	Network Administration: Security	3
CIS2950	Network Administration: Windows Client	3
CIS2952	Network Administration: Windows Server	4
CIS2954	Network Administration: Windows Network Infrastructure	3
CIS2980	Internship	2
CIS2987	Professional Networking Capstone	3
ELTN2465	PC Service and Support	3

Technical Electives: Choose 9 credits from the following:

CIS 1560	Web Server Administration	3
CIS 2510	Help Desk Methods	2
CIS 2515	Help Desk Lab	2
CIS2845	Network Administration: Advanced UNIX	3
CIS2999	Special Topics in Computer Networking	1-3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Understand general networking terminology and concepts, and be able to use these effectively in verbal and written communication
- Plan, install, configure, manage and troubleshoot networking hardware (e.g., servers, clients, printers, switches, routers, and other devices) and software (e.g., network operating systems, client programs, and other networking server and application software)
- Analyze organizational networking needs, and to design, implement, and administer network solutions using appropriate network technologies (e.g., directory infrastructure, protocols, network services, and security methods and systems)

IT Specialist: Network Administration (MCSA/CCNA) – 64 Credits

Associate in Applied Science Degree Program

This program trains students to manage networks in a business environment. Students will learn basic network communications and protocols, hardware, and operating systems concepts and develop skills with popular network operating systems like Novell's Netware, Windows Server, and UNIX. Students in this program choose from one of three tracks. The first year is identical for all students. In the second year, students choose a Novell, Microsoft, or Generalist track. The program is designed to prepare students for certifications such as Novell's CNA and CNE, Microsoft's MCP and MCSA, CISCO's CCNA, and CompTIA's A+ and Network+.

Course #	Course Title	Credits
CIS1521	Microcomputer Operating Systems	3
CIS1946	CISCO Networking I	3
CIS1947	CISCO Networking II	3
CIS1948	CISCO Networking III	3
CIS1949	CISCO Networking IV	3
CIS2745	Network Administration: UNIX	3
CIS2810	Network Administration: Security	3
CIS2950	Network Administration: Windows Client	3
CIS2952	Network Administration: Windows Server	4
CIS2954	Network Administration: Windows Network Infrastructure	3
CIS2980	Internship	2
ELTN2465	PC Service and Support	3
MATH1100	College Algebra OR	4
MATH 1115	Contemporary Discrete Mathematics	(4)

Technical Electives		9
Communication		3
Social/Behavioral Sciences		3
Humanities		3
General Education - other		3

Technical Electives: (choose 9 credits from the following):		
CIS1560	Web Server Administration	3
CIS2510	Help Desk Methods	2
CIS2515	Help Desk Lab	2
CIS2845	Network Administration: Advanced UNIX	3
CIS2999	Special Topics in Computer Networking	1-3

Minnesota Transfer Curriculum:

Select at least one course from the following:		
ENGL1106	College Composition I	3
COMM1105	Interpersonal Communication	(3)
COMM1110	Methods of Public Speaking	(3)
MATH1100	College Algebra	4

Select at least one course from the following:		
ECON1150	Principles of Economics: Macroeconomics	3
ECON1160	Principles of Economics: Microeconomics	(3)
PSYC1120	General Psychology	(3)
PSYC1135	Human Development	(3)
SOC1111	Introduction to Sociology	(3)

Select at least one course from the following:

ENGL1109	College Composition II	3
PHIL1125	Logic	(3)
PHIL1130	Ethics	(3)
PHIL1140	Critical Thinking	(3)

General Education – other:

Select from Communication, Mathematical/Logical Reasoning, History and the Social and Behavioral Sciences, or Humanities and Fine Arts 3

Program Outcomes

- Understand general networking terminology and concepts, and be able to use these effectively in verbal and written communication
- Plan, install, configure, manage and troubleshoot networking hardware (e.g., servers, clients, printers, switches, routers, and other devices) and software (e.g., network operating systems, client programs, and other networking server and application software)
- Analyze organizational networking needs, and to design, implement, and administer network solutions using appropriate network technologies (e.g., directory infrastructure, protocols, network services, and security methods and systems)

Microcomputer Office User Specialist – 12 credits Certificate Program

This program is designed for the business professional who wishes to be competent with Microsoft Office software applications. Students must be proficient in basic keyboarding skills prior to starting this program. Enrollment notes: Windows Software (CIS1525) is the prerequisite for all other courses for this certificate.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1715	Word Processing	2
ADSC1719	Presentation Software	2
CIS1510	Microcomputer Database	3
CIS1515	Microcomputer Spreadsheets	3

Technical Electives 24

Technical Electives: (choose 4 credits from the following):

ADSC1716	Advanced Word Processing	2
CIS1407	Introduction to FrontPage	2

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Understand core knowledge of keyboarding skills
 - Demonstrate basic skills of the Microsoft Office suite including Windows software

Web Developer – 30 Credits Certificate Program

The Web Developer Certificate Program is designed to prepare participants with foundation level skills for website development. The program will help prepare you for an entry-level position utilizing web-based programming skills. The 30-credit certificate can easily be extended into either the 48-credit Web Developer Diploma or 64-credit Web Developer Associate in Applied Science.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1406	Web Programming	3
CIS1410	Web Site Design	3
CIS1412	Web Design, Graphics, and Animation	4
CIS1415	Introduction to Programming Principles	4
CIS1419	Introduction to E-Commerce	2
CIS1510	Microcomputer Database	3
CIS1519	Survey of Operating Systems	3
CIS1636	JavaScript Programming	4

Technical Electives: (choose 4 credits from the following):

CIS1407	Introduction to FrontPage	2
CIS1408	Dynamic HTML/XML	3
CIS1560	Web Server Administration	3
CIS16xx	Any CIS1600 Series Course	
CIS26xx	Any CIS2600 Series Course	
CIS2635	Java Programming Language	4

Program Outcomes

- Install and troubleshoot hardware and operating systems components successfully
- Successfully design, implement, host a web page that incorporates appropriate use of graphics and animation

Web Developer – 48 Credits Diploma Program

This program trains students in Web development techniques, E-commerce concepts, and Web page and Web site design and implementation. Students will create Web pages, develop Web-based programs, and set up Web servers. Learning opportunities include lecture and study, hands on lab work, and internship and service learning projects.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1406	Web Programming w/HTML	3
CIS1407	Introduction to FrontPage	3
CIS1408	Dynamic HTML/XML	3
CIS1410	Web Site Design	3
CIS1412	Web Design, Graphics, and Animation	4
CIS1415	Introduction to Programming Principles	4
CIS1419	Introduction to E-Commerce	2
CIS1510	Microcomputer Database	3
CIS1519	Survey of Operating Systems	3
CIS1521	Microcomputer Operating Systems	2
CIS1560	Web Server Application	3
CIS1621	Introduction to C++ Programming Language	4
CIS1636	JavaScript Programming	4
CIS2530	Web Application Development	3
CIS2635	JavaScript Programming Language	4
CIS2636	JavaScript Programming	3
CIS2637	CGI Programming	1
CIS2980	Internship	1
ELTN2465	A+ PC Service & Support	3

Technical Electives (advisor approval) 4

Technical Electives (choose 4 credits from the following):

CIS1407	Introduction to FrontPage	2
CIS16xx	Any CIS1600 Series Courses	
CIS26xx	Any CIS2600 Series Course	
CIS2730	Database Management	4
CIS2740	Systems Analysis and Design	4

CIS2745	Network Administration: UNIX	3
CIS2980	Internship	1-3
CIS2999	Special Topics in Computer Science	1-7

Program Outcomes

- Student will be able to successfully design, implement, and host a Web page that incorporates appropriate use of graphics and animation
- Student will be able to design and implement Web-based applications using appropriate programming languages.
- Student will be able to install, configure and maintain Web server software.

Web Developer – 64 Credits

Associate in Applied Science Program

This program offers skill development in Web development applications, E-commerce concepts, and Web page implementation. Students learn to design, write, test, document, and implement web-based programs. Additional skills in effective communication, both oral and written, are incorporated throughout the program.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1406	Web Programming	3
CIS1408	Dynamic HTML/XML	3
CIS1410	Web Site Design	2
CIS1412	Web Design, Graphics, and Animation	4
CIS1415	Introduction to Programming Principles	4
CIS1419	Introduction to E-Commerce	2
CIS1510	Microcomputer Database	5
CIS1519	Survey of Operating Systems	3
CIS1560	Web Server Administration	3
CIS1635	Java Programming Language	4
CIS1636	JavaScript Programming	4
CIS2530	Web Application Development	3
CIS2635	Internet Programming Language	4
CIS2980	Internship	1
MATH1100	College Algebra	4
	OR	
MATH1115	Contemporary Discrete Mathematics	(4)

Communications	3
Social/Behavioral Sciences	3
Humanities	3
General Education	3

Technical Electives (choose 8 credits from the following):

CIS1407	Introduction to FrontPage	2
CIS1417	Beginning Oracle	2
CIS1418	Advanced Oracle	2
CIS1510	Microcomputer Database I	2
CIS1511	Microcomputer Database II	2
CIS1515	Microcomputer Spreadsheets I	2
CIS16xx	Any CIS1600 Series Course	
CIS26xx	Any CIS2600 Series Course	
CIS2621	Advanced C++ Programming Language	4
CIS2730	Database Management	4
CIS2740	Systems Analysis and Design	4
CIS2745	Network Administration: UNIX	3
CIS2980	Internship	1-3

Minnesota Transfer Curriculum:

Select at least one course from the following:

ENGL1106	College Composition I	3
COMM1105	Interpersonal Communication	(3)
COMM1110	Methods of Public Speaking	(3)
MATH1100	College Algebra	4

Select at least one course from the following:

ECON1150	Principles of Economics: Macroeconomics	3
ECON1160	Principles of Economics: Microeconomics	(3)
PSYC1120	General Psychology	(3)
PSYC1135	Human Development	(3)
SOC1111	Introduction to Sociology	(3)

Select at least one course from the following:

ENGL1109	College Composition II	3
PHIL1125	Logic	(3)
PHIL1130	Ethics	(3)
PHIL1140	Critical Thinking	(3)

General Education – other:

Select from Communication, Mathematical/Logical Reasoning, History and the Social and Behavioral Sciences, or Humanities and Fine Arts

	3
--	---

Program Outcomes

- Install and troubleshoot hardware and operating systems components successfully
- Successfully design, implement, host a Web page that incorporates appropriate use of graphics and animation
- Design and implement Web-based application.
- Use Web-based programming languages in a Web site.

Health Care

Background Study for all Students in Clinical Placements or Indirect contact with Patients/Residents:

Minnesota law requires that any person who provides services that involve direct contact with patients and residents at a health care facility licensed by the Minnesota Department of Health have a background study conducted by the state. An individual who is disqualified from having direct patient contact as a result of the background study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement in a Minnesota licensed health care facility. Failure to participate in a clinical placement required by the academic program could result in ineligibility to qualify for a degree in that program.

Students attending clinicals at a Wisconsin facility will be required to have a Wisconsin background study at a cost of \$7.50.

Dental Hygiene – 79 Credits

Associate in Applied Science Degree Program

The Dental Hygiene program provides academic and clinical educational opportunities for capable individuals to acquire the knowledge, skills, and attitude for the professional practice of dental hygiene. The curriculum focuses on basic sciences, as well as essential technical and clinical skills in preparation for providing preventive dental hygiene services to the public. Students have the opportunity to prepare for a variety of career opportunities in private dental offices, schools, hospitals, clinics, public health agencies, and the private business sector.

Due to the nature of the clinical experiences in the dental hygiene program, students will be participating in a work environment that has the potential of exposure to blood-borne pathogens. All students accepted into the dental

hygiene program are provided with written policy and instruction on infection control protocol to reduce the risk of disease transmission. The program complies with all institutional, local, state and federal policies. Policies and procedures on the dental hygiene program's infection control protocol are available to all applicants upon request. Other work-related disorders associated with the practice of dental hygiene could result from repetitive activities and exposure to high decibel sounds. Advancements in design and technology in the profession are continually evolving to minimize the effects.

The program in dental hygiene is accredited by the Commission on Dental Accreditation (and has been granted the accreditation status of "approval without reporting requirements"). The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation may be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Pre-Technical Course Requirements:

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
BIOL1140	Human Anatomy and Physiology I	4
BIOL1141	Human Anatomy and Physiology II	4
BIOL1170	Microbiology	3
CHEM1110	Aspects of Chemistry I	3
ENGL1106	College Composition I	3
PSYC1120	General Psychology	3
	OR	
PSYC1135	Human Development	(3)

Prior to taking any DENH courses, all courses listed above must be completed with a grade of C or better, with an overall G.P.A. of 2.4 or better. Students must complete 20 hours of a shadowing experience prior to taking any DENH courses. *Effective for Fall 2006, all entering students will need to have a 2.6 cumulative GPA or better in the six dental hygiene prerequisite courses. If there are more than 18 qualified applicants, priority will be given to those who had the prerequisites completed the earliest with the earliest file completion/program change date for the Dental Hygiene program.

* Students who have applied and were working on dental hygiene prerequisites prior to 2004 should see the Director of Admissions for advisement.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
DENH1401	Dental Anatomy	2
DENH1405	Developmental Head & Neck Anatomy	2
DENH1420	Dental Hygiene Theory & Practice I	5
DENH1505	General & Oral Pathology	2
DENH1511	Dental Materials	4
DENH1520	Dental Hygiene Theory II	2
DENH1528	Dental Hygiene Practice II	4
DENH1530	Dental Radiology	3
DENH1560	Periodontology I	1
DENH2401	Pharmacology for the Dental Hygienist	2
DENH2420	Dental Hygiene Theory III	2
DENH2428	Dental Hygiene Practice III	6
DENH2431	Radiographic Interpretation	2
DENH2460	Periodontology II	2
DENH2501	Pain Management	2
DENH2503	Dental Hygiene Seminar	1
DENH2520	Dental Hygiene Theory IV	1
DENH2528	Dental Hygiene Practice IV	6

DENH2550	Community Dental Health	2
HLTH1210	Nutrition	2
COMM1100	Fundamentals of Human Communication	3
	OR	
COMM1110	Methods of Public Speaking	(3)
	OR	
COMM1105	Interpersonal Communication	(3)
SOC1111	Intro to Sociology	3

Elective:
DENH2590 Dental Hygiene National Board Review 1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Provide current comprehensive dental hygiene services
- Interact effectively with patients, peers and dental health care members utilizing professional, written and oral communication
- Develop an identity of self, supportive of continuous learning and professional endeavor
- Exhibit ethical behavior consistent with professional conduct
- Initiate and assume responsibility for health promotion and disease prevention activities
- Acquire and synthesize information in a critical, scientific and effective manner.

Health Unit Coordinator – 120 Hours Certificate Program

This 120 hour course provides the student with information considered necessary for medical-clerical workers in hospital, clinic, nursing home and medical office settings. The students will be introduced to all aspects of medical orders and their transcription. Computer transcription will also be introduced and observation experiences at local medical settings are provided.

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Transcribe physician orders
- Understand the meaning of medical terminology, medical abbreviations and be able to use each correctly
- Understand the importance of patient confidentiality and medical ethics associated with the patient/care-giver relationship
- Demonstrate skills learned in the didactic portion of the class

Massage Therapist – 30 Credits Diploma Program

The Massage Therapist Program prepares the graduate for operation of his or her own massage therapy clinic, or employment in another health care related setting. The graduate therapist is able to observe and assess the client's musculoskeletal system, propose a treatment plan, implement the treatment plan, and observe the client's response to the treatment. Stress Reduction, Deep Tissue, Neuromuscular, Lymphatic, Somatic and other manual soft tissue techniques are used. Documentation is done to record muscular pain and restrictions, postural distortions, fascial adhesions, and the effects of stress on the body. Small business start-up and management provide a founda-

tion for entrepreneurs. All National Massage Therapist Certification requirements are met for eligibility for the National Massage Certification Exam. Therapists may find opportunities to work in a variety of settings. Most opportunities are with private business.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1430	ARC First Aid & CPR/AED Professional Rescuer	1
MTP1000	Massage Therapy Human Anatomy & Physiology	3
MTP1002	Massage Therapy Kinesiology	1
MTP1004	Massage Therapy Pathology	2
MTP1006	Issues in Massage Therapy Practice	2
MTP1008	Massage Therapy Procedures I	2
MTP1010	Full Body Stress Reduction Massage	4
MTP1012	Functional Somatic Release	2
MTP1014	Deep Tissue and Neuromuscular Massage	3
MTP1016	Special Populations Massage	4
MTP1018	Awareness and Injury Protection I	3
MTP1022	Massage Therapy Business: Start-up and Management	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Observe and assess the client's musculoskeletal system
- Propose and implement a treatment plan
- Observe and document the client's response to the treatment (including muscular pain and restrictions, postural distortions, fascial adhesions, and the effects of stress on the body)
- Meet the requirements for and be prepared to take the National Massage Certification Exam
- Produce a comprehensive business plan for starting, managing, and promoting a massage practice

Medical Assisting – 38 Credits Diploma Program

The Medical Assisting program is a 38 semester credit diploma program that prepares students for work in ambulatory care or medical office settings. The medical assistant is a multi-skilled professional with abilities in clinical, laboratory, and secretarial areas. This program includes course work in communication, sociology, anatomy and physiology, medical office, laboratory and clinical skills. The Lake Superior College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Programs on the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1410	Medical Terminology	1
ALTH1430	First Aid and CPR/AED for the Professional Rescuer	1
ALTH1440	Medical Ethics and the Law	1
BIOL1000	Human Body in Health and Disease	5
MEDA1400	Medical Assistant Clinical Procedures I	2
MEDA1402	Medical Assistant Clinical Procedures II	4
MEDA1405	Administrative Procedures for the Medical Assistant	3
MEDA2417	Medical Assistant Internship	4
MLTN1402	Basic Skills for Laboratory Personnel	4

MLTN1452	Medical Laboratory Procedures I	2
MLTN1522	Medical Laboratory Procedures II	2
MLTN1572	Phlebotomy Skills	1
RADT1415	X-ray Operation for Allied Health	2
SOC1111	Introduction to Sociology Communications	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Safely and ethically perform at an entry level the duties of the Medical Assistant in the areas of administrative office procedures, clinical patient related procedures and laboratory procedures
- Display dependability and professionalism when dealing with patients and employers
- Sit for the national certification exam

Medical Laboratory Technician – 72 Credits Associate in Applied Science Degree Program

The Medical Laboratory Technician (MLT) program provides students with the basic knowledge and technical skills required to work in a laboratory where they perform tests that aid in the diagnosis and treatment of disease. Students receive instruction in the medical disciplines of body fluids, chemistry, hematology, immuno-hematology, microbiology, phlebotomy, and serology followed by internships in a clinical setting. Satisfactory completion of the program enables graduates to sit for the national certification exams. Employment opportunities are found in a variety of settings: hospitals, clinics, physician office labs, home care, industry, research, and environmental facilities. The program is accredited by the National Accreditation Agency of Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, STE 670, Chicago, IL 60631, phone number (312) 714-8880.



Program Descriptions

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>	
ALTH1410	Medical Terminology	1	Degree in nursing. The college is a member of the Itasca Nursing Education Consortium (INEC), which offers an avenue for educational mobility for nurses in Northeastern Minnesota.
ALTH1440	Medical Ethics & Law	1	
MLTN1402	Basic Skills for the Laboratory Personnel	4	
MLTN1410	Immunology & Serology	3	
MLTN1460	Laboratory Mathematics & Solutions	1	
MLTN1510	Clinical Blood Banking	3	
MLTN1523	Clinical Microbiology	4	
MLTN1524	Parasitology/Mycology	1	
MLTN1572	Phlebotomy Skills for Health Professionals	1	
MLTN2530	Urinalysis & Coagulation	2	
MLTN2402	Clinical Simulations	3	
MLTN2441	Clinical Chemistry I	3	
MLTN2442	Clinical Chemistry II	2	
MLTN2450	Clinical Hematology	5	Students successfully completing the nursing and general education requirements of this program are eligible to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Graduates are prepared for entry level position in hospitals, nursing homes, and clinics.
MLTN2470	Laboratory Instrumentation	1	
MLTN2500	Medical Laboratory Technician Seminar	2	
MLTN2517	Internship-Blood Banking & Serology	3	
MLTN2527	Internship-Microbiology	3	
MLTN2537	Internship-Urology	1	
MLTN2547	Internship-Chemistry	3	
MLTN2557	Internship-Hematology	2	
MLTN2567	Internship-Coagulation	1	
MLTN2577	Internship-Phlebotomy & Associated Procedures	1	
BIOL1140	Human Anatomy & Physiology I	4	
BIOL1141	Human Anatomy & Physiology II	4	
CHEM1110	Aspects of Chemistry I	3	
CHEM1310	General Chemistry of Solutions	3	
ENGL1106	College Composition I	3	
COMM1100	Fundamentals of Human Communication	3	Laboratory experiences are provided in area community hospitals, clinics, nursing homes, and other health agencies.
SOC1111	Intro to Sociology	3	
PSYC1120	General Psychology	3	
ADSC1711	Computer Essentials	1	
Program Requirement: Current CPR certification is required prior to beginning clinical internship.			
Program Outcomes The program is designed to provide students with the knowledge and ability to: - Safely collect and process biological specimens for analysis - Perform accurate lab testing including quality assurance and quality control procedures - Operate lab instruments/analyzers and perform preventive and corrective maintenance when required - Identify problems and take appropriate action within pre-determined limits when corrections are indicated - Evaluate, interpret and relate lab test data to common disease processes - Demonstrate career entry competencies at the level needed to obtain and keep a job - Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals and the public			
Nursing – 64 Credits Associate in Science Degree Program Lake Superior College offers an Associate in Science			

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
NURS2510	Advanced Nursing Concepts	3
NURS2520	Adaptation Within the Family Unit: Pediatrics	2
NURS2530	Adaptations within the Family Unit: Obstetrics	2
NURS2640	Adaptations to Acute Health Interruptions: Cardiopulmonary Nursing	3
NURS2650	Adaptations to Acute Health Interruptions: Surgical Nursing	3
NURS2710	Adaptations to Complex Health Interruptions: Medical Nursing	4
NURS2720	Adaptations to Complex Health Interruptions: Mental Health Nursing	3
NURS2730	Adaptations to the Associate Degree Nursing Role	3
ENGL1109	College Composition II	3
COMM1100	Fundamentals of Human Communication	(3)
COMM1105	Interpersonal Communications	(3)
BIOL2160	Advanced Physiology	2
BIOL2170	Pathophysiology (recommended)	3
PHIL1130	Ethics (Humanities)	3
	Humanities (select from catalog)	1
SOC1111	Introduction to Sociology	3
	OR	
ANTH1110	Cultural Anthropology	(3)

Program Outcomes The program is designed to provide students with the knowledge and ability to: - Practice nursing within the adaptation framework providing safe care to patients in all stages of development at any given point on the health-illness continuum - Utilize the nursing process focusing on critical thinking skills in assisting patients and families with adaptive needs within the scope of the Associate Degree Nursing role - Provide nursing care reflecting an awareness of each patient's inherent worth and dignity - Interact effectively with patients, peers, and members of other health care disciplines utilizing written and oral communication	
--	--

- Develop an identity of self, supportive of continuous learning as a contributing community and professional member
- Identify dimensions of ethical and legal accountability of the individual nurse and the profession of nursing in meeting the health care needs of a society

Nursing Assistant

The Nursing Assistant course is designed to prepare the student for basic entry level employment in a nursing home, hospital, and other medical setting after successfully passing the registry exam. This course serves as an introduction to the nursing sequence for students who choose to advance in the nursing profession.

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Demonstrate understanding of 56 skills listed in course syllabus
 - Demonstrate knowledge of career registration requirements

**Practical Nursing – 50 Credits
Diploma Program**

Practical Nursing students are prepared for a career in the health care system. Practical nurses provide nursing care in community settings, such as nursing homes, skilled care facilities, hospitals, clinics, and home care agencies. Upon completion of the program, graduates may apply for Licensed Practical nursing Licensure by examination. Graduates may apply to associate degree completion nursing programs at regional community colleges which are members of Itasca Nursing Education Consortium or other community colleges in the state. Approved by the Minnesota Board of Nursing.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1410	Medical Terminology	1
NUPN1400	Nursing Trends I	1
NUPN1410*	Adult Nursing I	4
NUPN1420*	PN Technical Skills I	3
NUPN1430**	Medication Concepts	3
NUPN1440	Psychosocial Nursing	2
NUPN1458***	PN Clinical I	1
NUPN1468	PN Clinical II	3
NUPN1500	Nursing Trends II	1
NUPN1510	Adult Nursing II	4
NUPN1520	PN Technical Skills II	1
NUPN1531	Maternal/Child Nursing	3
NUPN1538	Maternal/Child Clinical	2
NUPN1540	Gerontology in Nursing	2
NUPN1558	PN Clinical III	2
NUPN1568	PN Clinical IV	2
NUPN1608	PN Clinical Synthesis	2
BIOL1150+	Human Anatomy	4
	OR	
BIOL1140+/1141	Human Anatomy and Physiology I & II	(8)
ENGL1106	College Composition I	3
PSYC1120	General Psychology	3
PSYC1135+	Human Development	3

Program Prerequisites:

- *NUNA1400 Nursing Assistant
- **MATH0451 Pre-Algebra for Health Careers (or equivalent of test out through CPT)



***ALTH1430 First Aid & CPR/AED for The Professional Rescuer, obtained just prior to starting clinicals

Note: + These courses have course pre-requisites. Check the college catalog or with your advisor.

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Demonstrate knowledge regarding the scope of practice of the Practical Nurse
 - Demonstrate proficiency in skills necessary to safely fulfill the role of the Practical Nurse
 - Demonstrate professional behavior incorporating ethical and legal considerations relevant to nursing
 - Communicate ideas clearly and concisely in written and oral form
 - Demonstrate interpersonal skills needed to function as an effective team member
 - Demonstrate problem-solving skills applying the concepts of the nursing process within the scope of the Practical Nurse
 - Develops an awareness of available resources beyond the classroom for the continued personal and professional growth

**Phlebotomy – 12 Credits
Certificate Program**

This certificate program is designed to prepare a laboratory practitioner whose primary duty is to obtain patient blood specimens by venipuncture and/or micro collection techniques and to facilitate collection and transportation of other clinical laboratory specimens.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>			
ADSC1711	Computer Essentials	1	PTA2650	Rehabilitation & Functional Therapy	4
ALTH1410	Medical Terminology	1	PTA2651	Advanced Physical Therapy Techniques	3
ALTH1420	Communication for Health Professionals	2	PTA2717*	Clinical Practice I	4
ALTH1440	Medical Ethics & Law	1	PTA2727*	Clinical Practice II	4
MLTN1402	Basic Skills for the Laboratory Personnel	4	PTA2747*	Clinical Practice III	3
MLTN1574	Collection Procedures and Skills for Phlebotomists	2	PTA2840	Professional Integration	1
MLTN2577	Internship-Phlebotomy & Associated Procedures	1	BIOL1140**	Human Anatomy & Physiology I AND	4
			BIOL1141+	Human Anatomy & Physiology II OR	4
			BIOL1150**	Human Anatomy AND	(4)
			BIOL1160+	Human Physiology	(4)
			ENGL1106**	College Composition I	3
			PSYC1120+	General Psychology	3
			PSYC1135+	Human Development	3
			COMM1105+	Interpersonal Communication OR	3
			COMM1110+	Fundamentals of Speech	(3)

Program Requirement:

ALTH1430	ARC First Aid & CPR/AED Professional Rescuer	1
----------	--	---

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Safely collect and process biological specimens for analysis
 - Demonstrate career entry competencies at the level needed to obtain and keep a job in phlebotomy
 - Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals and the public

*ALTH1430 or equivalent is a course prerequisite for PTA2717, PTA2727 and PTA2747

**Pre-technical course requirements must be taken prior to starting PTA courses.
+It is strongly recommended that these courses be taken prior to starting PTA courses.

Physical Therapist Assistant – 74 Credits Associate in Applied Science Degree Program

The Physical Therapist Assistant (PTA) program provides an opportunity to become an educated health care provider who delivers physical therapy services under the supervision of a physical therapist. The PTA is able to observe and assess the patient's condition, teach exercises and activities of daily living, use specialized equipment, demonstrate professional skills while implementing treatment procedures, observe the patient's response to treatment, and document. Physical therapy practitioners minimize physical disability, movement dysfunction, and pain. Physical therapist assistants may find opportunity to work in a variety of settings.

Accredited by the Commission on Accreditation in Physical Therapy Education.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1410**	Medical Terminology	1
PTA1000	Introduction to Health and Medical Literature	1
PTA1410	Introduction to Physical Therapist Assisting	3
PTA1411	Procedures for PTAs I	2
PTA1417	Physical Therapy Clinic I	2
PTA1421	Pathology for PTAs I	1
PTA1431	Therapeutic Exercise I	2
PTA1460	Functional Kinesiology I	2
PTA1512	Procedures for PTAs II	2
PTA1522	Pathology for PTAs II	1
PTA1527	Physical Therapy Clinic II	2
PTA1532	Therapeutic Exercise II	3
PTA1541	Issues in Physical Therapy Practice I	1
PTA1562	Functional Kinesiology II	4
PTA2613	Procedures for PTAs III	2
PTA2623	Pathology for PTAs III	2
PTA2637	Physical Therapy Clinic III	2
PTA2642	Issues in Physical Therapy Practice II	2

Program Outcomes

Graduates of the Physical Therapist Assistant program will be able to:

- Work under the supervision of a physical therapist in an ethical, legal, safe, and effective manner.
- Implement a comprehensive treatment plan developed by a physical therapist.
- Communicate regularly with supervising physical therapists about the patient's progress and the need for adjustments to be made by the physical therapist in treatment procedures in accordance with changes in patient status.
- Perform appropriate data collection techniques within the knowledge and limits of practice to assist supervising physical therapists in monitoring and modifying the plan of care.
- Interact with patients and families in a manner which provides the desired psychosocial support including the recognition of cultural and socioeconomic differences.
- Participate in the teaching of other health care providers, patients and families.
- Document relevant aspects of patient treatment.
- Participate in discharge planning and follow-up care.
- Demonstrate effective written, oral, and nonverbal communication with patients and their families, colleagues, health care providers, and the public.
- Demonstrate an understanding of levels of authority and responsibility; planning, time management, supervisory process, performance evaluations, policies and procedures; fiscal considerations for physical therapy providers and consumers; continuous quality improvement; and evidence-based practice.
- Demonstrate professional behaviors required for success in the field of physical therapy
- Identify career development and life-long learning opportunities.

Radiologic Technology – 82 Credits
Associate in Applied Science Degree Program

Radiologic Technology, a branch of medical imaging, is an exciting blend of advanced technology and patient care. Excellent communication and critical thinking skills, an aptitude for science and a compassionate nature are essential for success in the field. As radiographers, graduates have opportunities to use their knowledge of anatomy, physiology and physics to create permanent images that help physicians diagnose illness, injury, and disease. The radiographer is an integral member of the health care team during emergencies and surgery as well as during standard radiographic and fluoroscopic procedures.

Career and continuing education opportunities are diverse. Hospitals, clinics, health care facilities, industrial plants, educational centers, research centers and government agencies offer employment. Additional education is available in specialized imaging modalities such as nuclear medicine, radiation therapy, sonography, computerized tomography, mammography, bone densitometry and magnetic resonance imaging (MRI). These career choices also offer advancement opportunities in administration, education, sales and quality control.

This program is accredited by the Joint Review Committee on Education in Radiologic Technology; 20 North Wacker Drive, Suite 900, Chicago, IL 60606-2901, (312)704-5300, e-mail: mail@jrcert.org. The JRCERT is recognized by the United States Department of Education. Graduates of the Lake Superior College Radiologic Technology program are eligible for the national certification examination given by the American Registry of Radiologic Technologists.

Minnesota (and Wisconsin) law requires that any person who provides services that involve direct contact with patients and residents at a health care facility licensed by the Minnesota Department of Health (and WI) have a background study conducted by the state. An individual who refuses to cooperate with the background study or who is disqualified from having direct patient contact as a result of the background study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement in a Minnesota licensed health care facility. Failure to participate in a clinical placement required by the academic program would result in ineligibility to qualify for a degree in this program. Please visit the following site on the World Wide Web to learn more about the ethical standards required in Radiologic Technology:
<http://www.artt.org/web/ethics/standardethic.pdf>

This 24-month program is conducted at Lake Superior College with four clinical sites in the Twin Ports area as well as outreach sites as listed below. Placement in an outreach site may require some of clinical radiography to be completed in Duluth.

Minnesota
 Duluth Hibbing Bemidji Brainerd Moose Lake
 Crosby Virginia

Wisconsin
 Superior Ashland Onamia



Michigan
 Ironwood Grand Rapids

Radiologic Technology courses are taught in Duluth. This will require the student to be on campus at least one day a week for core courses.

Prereqs must be completed by spring term to be considered for fall entry
 Required Reading Level: College Level Reading
 Required Writing Level: College Level Writing
 Required Math Level: Algebra I Level
 Minimum Required GPA: 2.6 prerequisite cumulative
 Program Prerequisites:
 • Human Anatomy & Physiology I
 • Freshman Composition
 • Medical Terminology
 • Clinical Site Request

Course #	Course Title	Credits
RADT 1400	Introduction to Radiography and Patient Care	2
RADT 1453	Radiographic Procedures I	3
RADT 1463	Radiographic Procedures II	4
RADT 1552	Image Production I	3
RADT 1560	Image Production II	3
RADT 1558	Clinical Radiography I	6
RADT 1568	Clinical Radiography II	8
RADT 1578	Clinical Radiography III	4
RADT 2453	Radiographic Procedures III	2
RADT 2455	Radiographic Pathology	1

RADT 2550	Radiation Biology and Protection	2
RADT 2558	Clinical Radiography IV	3
RADT 2560	Quality Assurance in Radiologic Technology	1
RADT 2568	Clinical Radiography V	8
RADT 2572	Directed Studies in Radiologic Technology	1
RADT 2578	Clinical Radiography VI	4
ADSC 1711	Computer Essentials	1
PHIL 1130	Interpersonal Communications	3
BIOL 1141	Human Anatomy and Physiology II	4
Elective	Social and Behavioral Science	3

Program Outcomes:

As a partner in the community, the Radiologic Technology program will:

- Meet the academic needs of the student through curriculum planning and delivery of quality didactic instruction;
- Successfully prepare the graduates for entry level employment as a Radiologic Technologist through quality clinical experience;
- Prepare the student for success in the ARRT certification examination;
- Meet the needs of the medical profession by assisting the students in career planning and development;
- Maintain a high standard of educational instruction in Radiologic Technology.

Respiratory Care Practitioner – 76 Credits Associate in Applied Science Degree Program

Respiratory care practitioners are health care specialists who work with a variety of patients suffering from cardiopulmonary disorders. Working under the direction of a physician, respiratory care practitioners assist in the evaluation, treatment, management, and rehabilitation of these disorders. Patients treated by respiratory care practitioners range from premature infants to the elderly. Practitioners enjoy tremendous opportunity for diversity in their practices. Working in diagnostic labs, hospitals, clinics, home care and industry, respiratory care practitioners fill a vital role in our nation's health care system.

The clinical experience is diverse, with opportunities to train in a variety of areas and hospitals in our region. Upon graduation, the student will receive an Associate in Applied Science Degree in Respiratory Care. The graduate is then eligible to sit for the NBRC credentialing exams, which are required for licensure. Upon successful completion of the exams, the graduate will be awarded the credentials of Registered Respiratory Therapist (R.R.T.).

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1410	Medical Terminology	1
ALTH1440	Medical Ethics & Law	1
RESP1400	Introduction to Respiratory Care	1
RESP1410	Cardiopulmonary Anatomy and Physiology	4
RESP1420	Principles and Practice of Respiratory Care I	3
RESP1520	Principles and Practice of Respiratory Care II	3
RESP1530	Pathophysiology for RCP's	3
RESP1540	Diagnostic Testing	3
RESP1558	RCP Clinical I	6

RESP1620	Pharmacology for RCP's	2
RESP2410	Mechanical Ventilation	4
RESP2420	Adult Critical Care	3
RESP2430	Special Topics for RCP's	2
RESP2440	Neonatal/Pediatric Respiratory Care	3
RESP2458	RCP Clinical II	6
RESP2510	Directed Studies in Respiratory Care	3
RESP2558	RCP Clinical III	8
BIOL1140	Human Anatomy and Physiology I	4
	OR	
BIOL1150	Human Anatomy	(4)
BIOL1141	Human Anatomy and Physiology II	4
	OR	
BIOL1160	Human Physiology	(4)
BIOL1170	Microbiology	3
CHEM1110	Aspects of Chemistry I	3
ENGL1106	College Composition I	3
PSYC1120	General Psychology	3
	OR	
SOC1111	Introduction to Sociology	(3)

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Exhibit the ability to discern, implement, and evaluate information required to practice as an entry level Advance Respiratory Care Practitioner
- Demonstrate proficiency in technical skill required to practice as an entry level Advanced Respiratory Care Practitioner
- Exhibit behaviors which are professional in nature and are consistent with employer expectations as an entry level Advanced Respiratory Care Practitioner

Surgical Technology – 45 Credits Diploma Program

The Surgical Technologist is a member of the surgical team who works with surgeons, anesthesiologists, certified registered nurse anesthetists, registered nurses, and other surgical personnel in delivering patient care and assuming appropriate responsibilities before, during and after surgery. The surgical technologist is responsible for demonstrating knowledge and practice of basic patient-care concepts and applying principles of asepsis for optimal patient care in the operating room. The surgical technologist is responsible for case preparation to include skills in scrubbing, gowning, and gloving, instrumentation and equipment setup, assisting in draping the surgical patient and handing of instruments during the operative procedure. Surgical technologists may find the opportunity to work in a variety of work settings.

***Pre-technical course requirements:**

Pre-technical course requirements (indicated with a *) must be completed prior to taking Surgical Technology courses.

+Other course requirements:

Courses other than pre-technical courses and technical courses (indicated with a +) may be completed any time prior to graduation.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
*ALTH1410	Medical Terminology	1
*ALTH1430	ARC First Aid & CPR/AED Professional Rescuer	1

2005-2007 Catalog

*BIOL1005	Introduction to Cell Biology	1
*BIOL1150	Human Anatomy	4
	OR	
*BIOL1000	The Human Body in Health & Disease	(5)
+ENGL1106	College Composition I	3
	OR	
COMM1100	Fundamentals of Human Communication	(3)
	OR	
COMM1105	Interpersonal Communication	(3)
Surgical Technical Courses		
SURG1400	Pharmacology for Surgical Tech	2
SURG1412	Operating Room Theory	5
SURG1411	Operating Room Practice	4
SURG1420	Operating Room Lab I	4
SURG1428	Operating Room Procedures I	2
SURG1520	Operating Room Lab II	12
SURG1528	Operating Room Procedures II	6

Surgical Technology – 60 Credits Associate in Applied Science Degree Program

The Surgical Technologist is a member of the surgical team who works with surgeons, anesthesiologists, certified registered nurse anesthetists, registered nurses, and other surgical personnel in delivering patient care and assuming appropriate responsibilities before, during and after surgery. The surgical technologist is responsible for demonstrating knowledge and practice of basic patient-care concepts and applying principles of asepsis for optimal patient care in the operating room. The surgical technologist is responsible for case preparation to include skills in scrubbing, gowning, and gloving, instrumentation and equipment set-up, assisting in draping the surgical patient and handing of instruments during the operative procedure. Surgical technologists may find the opportunity to work in a variety of work settings. A 22-credit liberal education component diversifies the student's training and enhances transfer opportunities.

*Pre-technical course requirements:

Pre-technical course requirements (indicated with a *) must be completed prior to taking Surgical Technology courses.

+Other course requirements:

Courses other than pre-technical courses and technical courses (indicated with a +) may be completed any time prior to graduation.

Course #	Course Title	Credits
*ALTH1410	Medical Terminology	1
*ALTH1430	ARC First Aid & CPR/AED Professional Rescuer	1
*BIOL1005	Introduction to Cell Biology	1
*BIOL1150	Human Anatomy	4
+ENGL1106	College Composition I	3
	OR	
COMM1100	Fundamentals of Human Communication	(3)
	OR	
COMM1105	Interpersonal Communication	(3)
+PSYC1120	General Psychology	3
+PHIL1130	Ethics	3
+(Liberal Education Electives-8 credits required)		

(Students are encouraged to take BIOL1160 as elective)

Surgical Technical Courses

SURG1400	Pharmacology for Surgical Tech	2
SURG1412	Operating Room Theory	5
SURG1411	Operating Room Practice	4
SURG1420	Operating Room Lab I	4
SURG1428	Operating Room Procedures I	2
SURG1520	Operating Room Lab II	12
SURG1528	Operating Room Procedures II	6

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate knowledge regarding the scope of practice for Surgical Technologists
- Demonstrate proficiency in skills necessary to safely fulfill the role of the Surgical Technologist
- Demonstrate professional behavior consistent with the profession's and employer expectations utilizing ethical and legal considerations relevant to the role of the Surgical Technologist
- Demonstrate accountability as a health care professional
- Communicate effectively utilizing written and oral formats
- Demonstrate interpersonal skills needed to function as an effective team member
- Demonstrate use of problem solving and critical thinking skills by comprehending, applying and evaluating information relevant to the surgical technologist position
- Use educational opportunities for continued personnel and professional development

Public Safety Careers

Foundations of Corrections – 27 Credits

The Foundations in Corrections Certificate is a 27-credit program that certifies students' knowledge in corrections and its basis in social science. It includes courses in sociology, social deviance, criminal justice, and corrections.

Course #	Course Title	Credits
SOC1111	Introduction to Sociology	3
SOC1112	Comparative Sociology	3
SOC1114	Introduction to Criminal Justice	3
SOC1116	Introduction to Corrections	3
SOC1118	Correction Law	3
SOC1120	Criminal Trials: Law & Procedure	3
SOC1125	Social Deviance	3
SOC1130	Crime and Juvenile Delinquency	3
SOC2177	Community Experience in Corrections	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate an understanding of the social context in which the U.S. criminal justice system has developed and continues to function
- Demonstrate the ability to analyze how human behavior comes to be labeled deviant or conforming and how sanctions are developed and implemented within a society
- Analyze the ways in which structural elements of society influence both the incidence of crime and the way in which corrections programs are implemented.

- Accurately describe the legal and relational context in which corrections employees and offenders interact
- Demonstrate success in providing service to a correctional facility or program in the context of a learning program.

Fire Technology and Administration – 72 credits

Associate in Applied Science Degree Program

The Fire Technology and Administration program provides an opportunity for students to obtain basic and advanced instruction in fire prevention, fire fighting techniques, rescue, and management of fire services. Critical decision making is emphasized at the company officer level to ensure improvement in all aspects of fire technology, productivity, and safety. Aircraft Rescue and Fire Fighting classes are available to enhance the knowledge base of fire suppression technicians. Completion of liberal education courses early in program is recommended to establish an academic foundation for technical courses.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
FIRE1401	Today's Fire Service	2
FIRE1405	Recruit Fire Fighter	2
FIRE1410	Building Construction	3
FIRE1420	Inspection, Codes and Practices	3
FIRE1430	Hazardous Materials, Operations	2
FIRE1441	Recruit Fire Fighter Lab	2
FIRE1450	Fire Apparatus Operation	2
FIRE1460	Fire Fighting Tactics and Strategy	3
FIRE1560	Emergency Medical Technician-Basic	6
FIRE2400	Fire Service Reporting	3
FIRE2411	Recruit Fire Fighter II	2
FIRE2420	Fire Instructor	2
FIRE2430	Fire Officer	2
FIRE2440	Chemistry of Hazardous Materials	3
FIRE2460	Fire Inspection & Prevention Applications	3
FIRE2470	Fire Investigation	3
FIRE2500	Rescue	2
FIRE2511	Company Functions	2
CHEM1110	Aspects of Chemistry I	3
ENGL1106	College Composition I	3

Minnesota Transfer Curriculum:

Communication	3
History and Social/Behavioral Science	3
Humanities	3
Natural Sciences	3

Other Technical Credits:

Technical Electives	2
---------------------	---

Approved Electives:

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
FIRE1470	Natural Cover Fire Fighting	2
FIRE1510	Public Fire Education	2
FIRE1520	Rope Rescue Techniques	1
FIRE1530	Low Angle Rescue	1
FIRE1540	Fire Fighter I & II	3
FIRE1550	Fire Fighter I & II Lab	3
FIRE2520	Fire Management	2
FIRE2530	Fire Apparatus, Advanced	2
FIRE2540	High Angle Rescue	1
FIRE2550	Confined Space Rescues	1
FIRE2560	Chemistry of Hazardous Materials II	2
FIRE2570	Hazardous Materials, Technician	3



FIRE2600	EMT-Refresher	2
FIRE2610	Fire Intern 100	1
FIRE2620	Fire Intern 200	2
FIRE2630	Fire Intern 300	3
FIRE2640	Fire Intern 400	4
FIRE2650	Fire Intern 500	5
FIRE2660	Fire Intern 600	6
MATH1531	Technical Math I	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Be job ready based on nationally accepted performance standards and behaviors for fire fighters
- Be prepared with the appropriate background and experience to serve as Fire Equipment Operators
- Be prepared with the appropriate background and experience to serve as entry level Company Officers
- Be able to use the applicable building and safety codes to conduct building inspections and related fire prevention activities
- Be able to integrate the Incident Command System and its component parts into daily work assignments and all emergency response settings
- Be able to perform the functions of an Emergency Medical Technician at the appropriate level for the department and interact with all providers to ensure good patient care
- Be able to use the nationally recognized standards and behaviors for the response to and mitigation of hazardous materials releases and emergencies
- Be able to apply a broad working knowledge of rescue techniques and theories to include specialized areas not limited to activities like high level/high angle, confined spaces and water related rescues
- Be experienced in day to day fire department type operations, station life, and working conditions

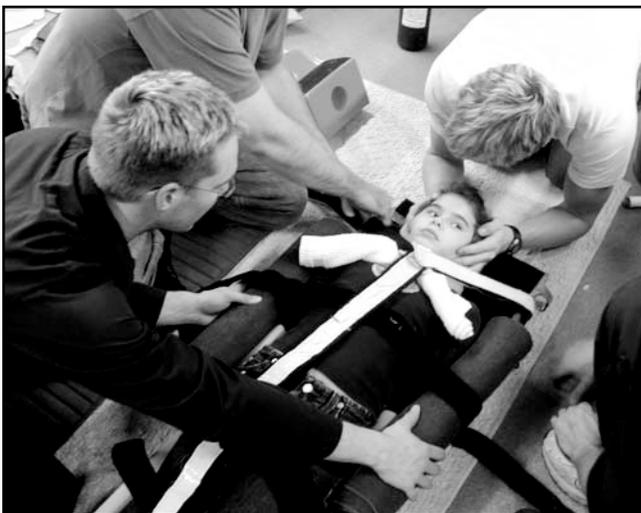
Paramedic – 72 Credits

Associate of Applied Science Degree Program

Graduates of this Associate Degree program will be qualified and skilled professionals in the field of emergency medical services as a Paramedic. The Emergency Medical Technician-Paramedic (EMT-P) is a person who works in the exciting, expanding field of Emergency Medical Services (EMS). Current EMT-B certification is a prerequisite for this program, as well Anatomy Physiology I. This degree incorporates theoretical knowledge with extensive clinical application and experience. The specialization and advanced education and training in the care and transport of the critically ill and injured can mean the difference between life and death. AAS degree graduates have enhanced potential for upward progression in the career of pre-hospital care. The curriculum includes a general education component that gives the student a well-rounded foundation of knowledge. This program prepares students to write the National Registry Paramedic Exam.

Career opportunities for paramedics include: private ambulance companies, hospitals, industry and city health agencies, fire departments and law enforcement agencies. Park services, ski patrols, and other groups in many countries often educate their personnel to become EMT's or Paramedics as part of their duties.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
EMTP1120	Paramedicine I	3
EMTP1220	Paramedicine Skills I	3
EMTP1225	Pharmacology	2
EMTP1420	Paramedicine II	3
EMTP1520	Paramedicine Skills II	3
EMTP1600	Critical Care Clinical	2
EMTP1700	Support Services Clinical	2
EMTP1800	ALS Ambulance Clinical	4
EMTP2020	Paramedicine III	4
EMTP2120	EMS Hazardous Materials	1
EMTP2220	Paramedicine IV	3
EMTP2300	Advanced Cardiac Life Support Provider	1
EMTP2320	Advanced Trauma Life Support Provider	1
EMTP2340	Pediatric Advanced Life Support (PALS)	1



EMTP2360	Neonatal Resuscitation Program	1
EMTP2380	Advanced Medical Life Support Provider	1
EMTP2400	Emergency Department Clinical	3
EMTP2500	Acute Care Clinical	3
EMTP2600	Paramedic Internship	8
	Technical Electives	3

<u>Minnesota Transfer Curriculum</u>		
BIOL1140	Human Anatomy and Physiology I	4
COMM1105	Interpersonal Communication	3
ENGL1106	College Composition I	3
PSYC1120	General Psychology	3
PSYC1135	Human Development	3
	Electives (MTC)	4

<u>Approved Technical Electives:</u>		
EMTP1125	Emergency Vehicle Operations (EVOC)	1
EMTP1300	Bioterrorism	2
FIRE1470	Natural Cover Fire Fighting	2
FIRE1520	Rope Rescue Techniques	1
FIRE1530	Low Angle Rescue	1
FIRE1565	Wilderness Survival	2
FIRE2540	High Angle Rescue	1
FIRE2550	Confined Space Rescues	1
FIRExxxx	Rescue Diver	1

Trade and Industry

Computer Service Technician – 14 Credits Certificate Program

The Computer Service Technician Certificate program educates students in the areas of PC setup, configuration, and repair. It has a focus on preparing the student for the COMPTIA sponsored A+ certification exam. This provides students with the skills required to obtain jobs as computer technicians in a variety of industries and businesses.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1521	Microcomputer Operating Systems	3
ELTN1420	Soldering and Surface Mount Lab	1
ELTN2410	Media and Cabling Theory	1
ELTN2415	Media and Cabling Lab	2
ELTN2465	PC Technician: Hardware	3
ELTN2505	Networking & Service and Support	3
ELTN2515	COMPTIA A+ Certification Exam Prep	1

Note: This certificate is preparation for A+ Certification

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Install various computer operating systems
- Install and configure various PC hardware components, e.g. memory, hard drives, modems, and network cards
- Be proficient at cabling using appropriate standards and media

Architectural Technology – 64 Credits Diploma Program

Architectural Technology students apply building technology and drafting expression in the production of architectural drawings. This program is designed to develop technical skills which are used in the architectural office and

are pertinent to engineering, contracting, and other construction-related fields.

Course #	Course Title	Credits
ARCH1400	Intro to Architecture	3
ARCH1411	Materials and Methods I	2
ARCH1415	Project Lab I	6
ARCH1420	Intro to Structures	2
ARCH1425	Architectural CAD I	3
ARCH1430	Architecture Design-Criteria/Constraints	3
ARCH1435	Site Design	2
ARCH1441	Materials and Methods II	3
ARCH1445	Project Lab II	4
ARCH1455	Architectural CAD II	3
ARCH2400	Mechanical & Electrical Systems	3
ARCH2405	Architectural CAD III	2
ARCH2435	Project Lab III	6
ARCH2450	Specifications and Construction Administration	3
ARCH2460	Commercial Project	6
ARCH2470	Structural Applications	3
MATH1500	Applied Algebra and Trigonometry	4

Other Technical Credits:
 Technical Electives 6

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Demonstrate an understanding of construction materials and processes
 - Develop accurate, constructible architectural drawings
 - Apply regulatory requirement criteria
 - Demonstrate CAD proficiency
 - Apply basic structural design concepts
 - Estimate material quantities and construction costs
 - Utilize site design principles
 - Demonstrate an understanding of Mechanical/Electrical systems

Architectural Technology – 72 Credits Associate in Applied Science Degree Program

The Architectural A.A.S. Degree program prepares students to apply building technology and drafting expression in the production of architectural drawings. This program is designed to develop skills which are pertinent to architecture, engineering, contracting, and other related fields. The inclusion of an 18-credit liberal education component diversifies the student's training and enhances transfer opportunities to other institutions of higher learning.

Course #	Course Title	Credits
ARCH1400	Intro to Architecture	3
ARCH1411	Materials and Methods I	2
ARCH1415	Project Lab I	6
ARCH1420	Intro to Structures	2
ARCH1425	Architectural CAD I	3
ARCH1430	Architecture Design-Criteria/Constraints	3
ARCH1435	Site Design	2
ARCH1441	Materials and Methods II	3
ARCH1445	Project Lab II	4
ARCH1455	Architectural CAD II	3
ARCH2400	Mechanical & Electrical Systems	3
ARCH2405	Architectural CAD III	2

ARCH2435	Project Lab III	6
ARCH2450	Specifications and Construction Administration	3
ARCH2460	Commercial Project	6
ARCH2470	Structural Applications	3

Minnesota Transfer Curriculum:
 Communication 3
 Humanities 3
 Natural Science or Math 3
 Math 3
 Social/Behavioral Science 3
 Non-designated 3

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Demonstrate an understanding of construction materials and processes
 - Develop accurate, constructible architectural drawings
 - Apply regulatory requirement criteria
 - Demonstrate CAD proficiency
 - Apply basic structural design concepts
 - Estimate material quantities and construction costs
 - Utilize site design principles
 - Demonstrate an understanding of Mechanical/Electrical systems

Basic Electronics Certificate – 25 Credits Certificate Program

This certificate is designed to give basic knowledge of electronics and computers. The technical knowledge received will prepare students for future training on specific electronic equipment.

Course #	Course Title	Credits
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering & Surface Mount Lab	1
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1450	Microcontroller Theory	4
ELTN1455	Microcontroller Lab	2
ELTN1500	Practical PC Maintenance	3

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
 - Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
 - Understand basic circuit analysis techniques
 - Troubleshoot and repair common electronic circuits

Broadcasting – 33 Credits Diploma Program

This program is designed to prepare the graduate for a wide variety of positions in radio and television. In the technical or production disciplines, graduates are trained for jobs ranging from highly visible on-the-air assignments to positions on production or news teams. Graduates can also gain skills needed for careers in broadcast copy writing, programming, advertising sales, or management. Lake

2005-2007 Catalog

Superior College Broadcasting students receive valuable hands-on experience in LSC's own radio and TV studios and through internships and experience at local broadcast stations.

Course #	Course Title	Credits
BDCT1411	Introduction to Radio	3
BDCT1412	Radio Production	3
BDCT1430	Broadcast Management & Programming	2
BDCT1511	Television Production I	4
BDCT1512	Television Production II	4
BDCT1610	The Business of Broadcasting & Advertising	3
BDCT1670	Broadcast Mgmt & Programming OR	2
BDCT1680	Radio/TV Sales	(2)
COMM1601	HR-The Individual in Career or Classroom	1
ENGL1106	College Composition I	3
COMM1602	HR-Team-building in Career or Classroom	1

Other Technical Credits:
Technical Electives 7

Approved Electives:

BDCT1620	Radio/TV Copywriting	4
BDCT1640	Broadcast Journalism	3
BDCT1797	Broadcast Internship	1-3
BDCT1799	Broadcast Practicum	1-3

Transfer:
LSC Broadcasting credits are directly accepted in the Communicating Arts Department at the University of Wisconsin – Superior.

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Shoot and edit single camera television projects using both analog and digital equipment
 - Participate in cooperative television studio production teams
 - Record, voice, and produce radio commercials using both analog and digital equipment
 - Define and use terms and techniques commonly in use in broadcast advertising and programming
 - Define and use audience research (ratings) terms

Building Construction Technology – 64 Credits Diploma Program

The Building Construction Technology program prepares students to build and repair structures to comply with existing codes. Students learn to read blueprints, sketches, and specifications for information pertaining to dimensions, type of materials required, and standards of work. Experience is gained working with a variety of hand tools, power tools, and construction equipment. Skills learned in the program include wood and metal framing, concrete forming, remodeling, and interior and exterior finishing of residential and commercial buildings. The courses in the second year of the program are offered at an off-campus building site. The second year students build a residential structure from the initial site layout through all the construction phases to the final finish work.



Course #	Course Title	Credits
ALTH1435	American Red Cross First Aid & Community CPR	1
BLDG1400	Construction Safety	4
BLDG1407	Concrete Forming	3
BLDG1410	Basic Framing	5
BLDG1415	Cabinets & Laminates	2
BLDG1420	Leadership & Trade/Labor Relations	2
BLDG1425	Estimating for Building Construction	1
BLDG1430	Building Site Lay-Out	1
BLDG1435	Blueprint Reading	3
BLDG1440	Stair Design & Construction	3
BLDG1445	Framing With Metal & Welding	3
BLDG1450	Interior/Exterior Construction	3
BLDG2412	Site Preparation & Concrete Form Work	5
BLDG2415	Floor & Wall Framing	3
BLDG2420	Roof Framing	3
BLDG2425	Understanding Working Drawings	2
BLDG2430	Energy & Sound Control	2
BLDG2435	Exterior Finishing	4
BLDG2440	Stair Construction	2
BLDG2445	Introduction to Construction Management	2
BLDG2450	Interior Finishing/Casework	6
COMM1601	HR-The Individual in Career or Classroom	1
COMM1602	HR-Team-building in Career or Classroom	1

Other Technical Credits Required:
Building Construction Elective 2

Approved Electives:

BLDG1500	Residential Decks	1
BLDG1505	Computerized Estimating for Building Construction	1
BLDG1510	Resource-Efficient Building	1
BLDG1515	Metal Work	1

BLDG1520	Drywall Finishing	1
BLDG2507	Internship	1-4

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Erect concrete forms for footings, walls, columns, and flat work
- Frame floors, walls, and roofs using wood and steel framing
- Install exterior finish components
- Install interior finish components
- Estimate building materials requirements
- Coordinate construction activities
- Perform construction duties safely

Building Construction Technology – 72 Credits Associate in Applied Science Degree Program

The Building Construction Technology program prepares students to build and repair structures to comply with existing codes. Students learn to read blueprints, sketches, and specifications for information pertaining to dimensions, type of materials required, and standards of work. Experience is gained working with a variety of hand tools, power tools, and construction equipment. Skills learned in the program include wood and metal framing, concrete forming, remodeling, and interior and exterior finishing of residential and commercial buildings. The courses in the second year of the program are offered at an off-campus building site. The second year students build a residential structure from the initial site layout through all the construction phases to the final finish work. An 18-credit liberal education component diversifies the student's training and enhances transfer opportunities to other institutions.

Course #	Course Title	Credits
BLDG1400	Construction Safety	4
BLDG1407	Concrete Forming	3
BLDG1410	Basic Framing	5
BLDG1415	Cabinets & Laminates	2
BLDG1425	Estimating for Building Construction	1
BLDG1430	Building Site Lay-Out	1
BLDG1435	Blueprint Reading	3
BLDG1440	Stair Design & Construction	3
BLDG1450	Interior/Exterior Construction	3
BLDG1465	Framing with Metal	2
	OR	
BLDG1445	Framing with Metal and Welding	(3)
BLDG2414	Site Preparation and Foundation	4
	OR	
BLDG2412	Site Preparation and Concrete Formwork	(5)
BLDG2415	Floor & Wall Framing	3
BLDG2420	Roof Framing	3
BLDG2425	Understanding Working Drawings	2
BLDG2430	Energy and Sound Control	2
BLDG2435	Exterior Finishing	4
BLDG2440	Stair Construction	2
BLDG2445	Introduction to Construction Management	2
BLDG2450	Interior Finishing/Casework	6

Minnesota Transfer Curriculum:	
Communications	3
Math/Science	3
Social/Behavior Science/Humanities	3
Non-designated	9

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Erect concrete forms for footings, walls, columns, and flat work
- Frame floors, walls, and roofs using wood and steel framing
- Install exterior finish components
- Install interior finish components
- Estimate building materials requirements
- Coordinate construction activities
- Perform construction duties safely

Civil Engineering Technology – 64 Credits Diploma Program

In the Civil Engineering Technology program, students learn skills they can use in a career assisting Civil Engineers and Land Surveyors. The student will find a wide range of opportunities in all phases of construction, design, and surveying. The course of instruction includes route surveying, property descriptions, quantity calculations, material testings and CAD (Computer Aided Design) to design roads, building sites, and property subdivisions.

Course #	Course Title	Credits
CADE1407	Engineering CAD	5
CETT1402	Introduction to Surveying	5
CETT1410	Introduction to Material Testing	3
CETT1420	Route Survey	4
CETT1430	Civil CAD Applications	4
CETT1440	Engineering Problem Solving	2
CETT2400	Intermediate Survey	3
CETT2407	Engineering Technology Internship	1-7
CETT2410	Stormwater Management	3
CETT2420	Land Survey Systems	3
CETT2430	Site Development	3
CETT2440	Civil Estimating	3
CETT2450	Highway Design	4
CETT2460	Advanced Survey	3

Communication Elective 3
 Other Technical Electives:

Technical Electives 9

Students may use the following courses as Technical Electives. Sixteen (16) credits need to be taken between elective and internship courses. If a student is not accepted for an internship, elective courses can be substituted.

CETT1500	Introduction to Microstation/Geopak	4
CETT1510	Geopak Survey	3
CETT1505	Geopak Design	4
ARCH1420	Introduction to Structures	2
CADE2700	Microstation I	5
	Math/Science Elective	3

MnDOT certification courses are also accepted as technical electives. (CETT2600, 2610, 2620, 2650, 2655, 2660, 2665, 2710, and 2720.)

Students must be at college level in reading, writing, and mathematics prior to starting any CETT course.

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Determine accuracy of their level work
- Verify the accuracy of their total station data
- Perform standard survey calculations
- Develop Site and Highway plan sets
- Research related information in both print and electronic formats
- Set-up and create drawings using CAD

**Civil Engineering Technology – 72 Credits
Associate in Applied Science Degree Program**

In the Civil Engineering Technology A.A.S. Program, students learn career skills they can use to assist civil engineers and land surveyors in all phases of their projects and inspection duties. The course of instruction includes Civil CAD (computer aided design) using AutoCad and other civil CAD software, surveying, quantity calculations, and material testing. In addition, the student takes 18 or more liberal education credits to strengthen their math and communication abilities. The program is designed to train students for employment while also offering them transfer opportunities to St. Cloud State, U of M, and Moorhead State.

Course #	Course Title	Credits
CADE1407	Engineering CAD	5
CETT1402	Introduction to Surveying	5
CETT1410	Introduction to Material Testing	3
CETT1420	Route Survey	4
CETT1430	Civil CAD Applications	4
CETT1440	Engineering Problem Solving	2
CETT2400	Intermediate Survey	3
CETT2407	Engineering Technology Internship	1-7
CETT2410	Stormwater Management	3
CETT2420	Land Survey Systems	3
CETT2430	Site Development	3
CETT2440	Civil Estimating	3
CETT2450	Highway Design	4
CETT2460	Advanced Survey	3

Other Technical Electives:
Technical Electives 2

Minnesota Transfer Curriculum:
Non-designated Electives 6

Humanities	3
Social/Behavioral Science	3
Communication	3
Math/Science	3

Students may use the following courses as Technical Electives. Nine (9) credits need to be taken between elective and internship courses. If a student is not accepted for an internship, elective courses can be substituted.

CETT1500	Introduction to Microstation/Geopak	4
CETT1505	Geopak Design	4
CETT1510	Geopak Survey	3
ARCH1420	Introduction to Structures	2
CADE2700	Microstation I	5

MnDOT certification courses are also accepted as technical electives. (CETT2600, 2610, 2620, 2650, 2655, 2660, 2665, 2710, 2720.)

Students must be at a college level in reading, writing, and mathematics prior to starting any CETT course.



Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Determine accuracy of their level work
- Verify the accuracy of their total station data
- Perform standard survey calculations
- Develop Site and Highway plan sets
- Research related information in both print and electronic formats
- Set-up and create drawings using CAD

**Commercial and Residential Wiring –
64 Credits
Diploma Program**

The Commercial and Residential Wiring diploma program teaches students to install, operate, and repair electrical systems. Students also learn to install wiring in buildings and to make power connections from an outside source. Training in the program includes simulated residential, commercial, and industrial settings. Also covered will be DC and AC motor controls, electrical distribution panels, and testing equipment. Students become familiar with digital applications, analog solid state, and programmable controllers that are used within industrial settings throughout the nation.

Course #	Course Title	Credits
ELEC2401	Residential Wiring	2
ELEC2402	Residential Wiring Lab	2
ELEC2405	Electrical Blueprint Reading	2
ELEC2421	Commercial Wiring I	2
ELEC2422	Commercial Wiring I Lab	2
ELEC2431	Motor Control	2
ELEC2432	Motor Control Lab	1
ELEC2440	National Electrical Code I	2
ELEC2451	Commercial Wiring	2
ELEC2452	Commercial Wiring Lab	2
ELEC2461	Electrical Troubleshooting	2
ELEC2471	Industrial Wiring	2
ELEC2472	Industrial Wiring Lab	2
ELEC2501	Electrical Controls	2
ELEC2502	Electrical Controls Lab	1
ELEC2510	National Electrical Code II	2
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Theory Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering & Surface Mount Lab	1

ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN1460	Programmable Controllers	2
ELTN1500	Practical PC Maintenance	3

Other Technical Credits:
 Technical Electives 10

Approved Electives: (optional category)

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ALTH1435	American Red Cross First Aid & Community CPR	1
CIS1521	Microcomputer Operating Systems	3
COMM1601	HR-The Individual in Career or Classroom	1
COMM1602	HR-Team-Building in Career or Classroom	1
ELEC2490	Electrical Internship	1-4
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1445	AD/DC Rotating Equipment Lab	5
ELTN1450	Microcontroller Theory	4
ELTN2400	CET Exam Preparation	1
ELTN2401	FCC Exam Preparation	1
ELTN2410	Media & Cabling Theory	1
ELTN2415	Media & Cabling Lab	2
ELTN2420	Robotics	2
ELTN2430	Introduction to Instrumentation	2
ELTN2440	Motor Speed Controllers	2
ELTN2450	Programmable Control Applications	2
ELTN2477	Electronics Internship	1-4
ELTN2505	Networking + Service and Support	3
ELTN2999	Special Topics in Electronic Engineering Technology	1-3
MATH1531	Technical Math I	3
MATH1532	Technical Math II	3

Program Outcomes

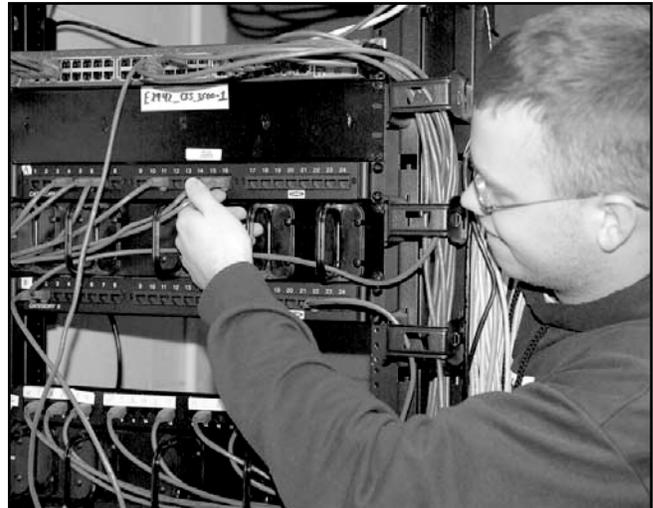
- The program is designed to provide students with the knowledge and ability to:
- Have a working knowledge and understanding of the National Electrical Code (NEC)
 - Have a working knowledge of safety issues relating to the electrical industry and workplace
 - Understand and be able to perform tasks relating to residential wiring
 - Understand and be able to perform tasks relating to commercial wiring
 - Understand and be able to perform tasks relating to industrial wiring

Commercial and Residential Wiring – 72 Credits

Associate in Applied Science Degree Program

The Commercial and Residential Wiring A.A.S. Degree program combines technical courses with general education courses, offering graduates an excellent foundation for employment leading to leadership roles, management positions, and potential transfer to institutions with baccalaureate degrees. This program is designed to develop entry-level skills; and to complete the program within two years, the student is advised to follow the program planner.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ELEC2401	Residential Wiring	2
ELEC2402	Residential Wiring Lab	2



ELEC2405	Electrical Blueprint Reading	2
ELEC2421	Commercial Wiring I	2
ELEC2422	Commercial Wiring I Lab	2
ELEC2431	Motor Control	2
ELEC2432	Motor Control Lab	1
ELEC2440	National Electrical Code I	2
ELEC2451	Commercial Wiring	2
ELEC2452	Commercial Wiring II Lab	2
ELEC2461	Electrical Troubleshooting	2
ELEC2471	Industrial Wiring	2
ELEC2472	Industrial Wiring Lab	2
ELEC2501	Electrical Controls	2
ELEC2502	Electrical Controls Lab	1
ELEC2510	National Electrical Code II	2
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Theory Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering and Surface Mount Lab	1
ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN1460	Programmable Controllers	2
ELTN1500	Practical PC Maintenance	3

Minnesota Transfer Curriculum:

Communications	3
Math/Science	3
Social/Behavioral Science	3
Humanities	3
Non-designated	8

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Have a working knowledge and understanding of the National Electrical Code (NEC)
 - Have a working knowledge of safety issues relating to the electrical industry and workplace
 - Understand and be able to perform tasks relating to residential wiring
 - Understand and be able to perform tasks relating to commercial wiring
 - Understand and be able to perform tasks relating to industrial wiring

Computer Aided Design Engineering Technology – 63 Credit Diploma Program

The Computer Aided Design Engineering Technology program prepares students to translate the ideas, sketches, and specifications of engineers and designers into workable plans which are used in product fabrication. Students learn to use engineering technology in determining exact specifications for new product design or modification, or redesign of present products. The course begins with instruction in basic drafting skills and advances to more complex technological areas. Major emphasis will be on the application and use of computer aided design.

Course #	Course Title	Credits
CADE1401	Orthographic Detailing & Dimensioning	3
CADE1405	Introduction to CAD Engineering Technology	1
CADE1407	Engineering CAD	5
CADE1410	Sections & Auxiliary Views	2
CADE1420	Manufacturing Processing & Design	2
CADE1430	Geometric Dimensioning & Tolerancing	2
CADE1450	Mechanical Details	3
CADE1460	Sheet-Metal Development	3
CADE2400	Engineering CAD II	5
CADE2410	Engineering CAD III	5
CADE2420	Electrical/Electronic Drawings	3
CADE2430	Industrial Piping Layout	3
CADE2440	Fluid Power Design	3
CADE2450	Technical Illustration 3D	3
CADE2460	Jigs & Fixtures	3
CADE2470	Design Project	5
MATH1500	Applied Algebra and Trigonometry	4
MATH1733	Advanced Technical Math	5

Other General Education Credits:

Electives	7
Natural Science Elective	4
Communications Elective	3

Internship Classes Available:

CADE2407	Engineering Technology Internship	1-7
----------	-----------------------------------	-----

Microstation Advanced Certificate

CADE1405	Introduction to CAD Engineering Technology	1
CADE1407	Engineering CAD	5
CADE2700	Microstation I	5
CADE2710	Microstation II	5

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Illustrate orthographic viewing and dimensioning techniques
 - Demonstrate section and auxiliary detailing
 - Display dimensioning and tolerancing techniques
 - Outline an understanding of manufacturing principles and practices
 - Delineate mechanical component details
 - Illustrate sheet metal development drawings
 - Demonstrate Basic through advanced principles of CAD applications
 - Create and formulate electrical/electronic drawings



- Create and formulate industrial piping layouts
- Create and formulate fluid power drawings
- Create and formulate jig and fixture design
- Present technical illustrations using 3-dimensional design
- Provide a cumulative final design project

Computer Aided Design Engineering Technology – 72 Credits Associate in Applied Science Degree Program

The A.A.S. Computer Aided Design Engineering Technology program provides students with an engineering technology which incorporates computer graphics and technical illustrations. The program prepares students for advanced computer applications emerging in the fields of engineering, graphics, and design. Students will learn to use engineering technology in determining exact specifications for new product design, modification, or redesign of present products. This course begins with instruction in basic drafting skills and advances to more complex technological areas. Major emphasis will be on the application and use of computer aided design.

Course #	Course Title	Credits
CADE1401	Orthographic Detailing & Dimensioning	3
CADE1405	Introduction to CAD Engineering Technology	1
CADE1407	Engineering CAD	5
CADE1410	Sections & Auxiliary Views	2
CADE1420	Manufacturing Processing & Design	2
CADE1430	Geometric Dimensioning & Tolerancing	2
CADE1450	Mechanical Details	3
CADE1460	Sheet-Metal Development	3
CADE2400	Engineering CAD II	5
CADE2410	Engineering CAD III	5
CADE2420	Electrical/Electronic Drawings	3
CADE2430	Industrial Piping Layout	3
CADE2440	Fluid Power Design	3
CADE2450	Technical Illustration 3D	3
CADE2460	Jigs & Fixtures	3
CADE2470	Design Project	5
Technical Electives		3

Technical Electives:

CADE2407	Engineering Technology Internship	1-7
CADE2480	Mechanical Desktop	3

CADE2999	Special Topics	1-3
CETT1405	Fundamentals of Surveying ³	
CADE2700	Microstation I	5
CADE2710	Microstation II	5

Microstation Advanced Certificate		
CADE1405	Introduction to CAD Engineering Technology	1
CADE1407	Engineering CAD	5
CADE2700	Microstation I	5
CADE2710	Microstation II	5

General Education Courses (Minnesota Transfer Curriculum) ¹⁸ Credits required		
Social/Behavioral Science		0-6
Humanities		0-6
Communications		3-6
Math/Science		3-6

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Illustrate orthographic viewing and dimensioning techniques
 - Demonstrate section and auxiliary detailing
 - Display dimensioning and tolerancing techniques
 - Outline an understanding of manufacturing principles and practices
 - Delineate mechanical component details
 - Illustrate sheet metal development drawings
 - Demonstrate basic through advanced principles of CAD applications
 - Create and formulate electrical/electronic drawings
 - Create and formulate industrial piping layouts
 - Create and formulate fluid power drawings
 - Create and formulate jig and fixture design
 - Present technical illustrations using 3-dimensional design
 - Provide a cumulative final design project
 - Create engineering drawings using advanced CAD applications

Computer Aided Design Fundamentals – 18 Credit Certificate Program

The Computer Aided Design Fundamentals certificate is designed to enhance the education of a student who may occasionally come in contact with Computer Aided Design (CAD) through another related technical field of study. This will provide a basic working knowledge of CAD and is not intended to take the place of either the two-year AAS degree or the two-year diploma degree.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CADE1401	Orthographic Detailing & Dimensioning	3
CADE1405	Introduction to CAD Engineering Technology	1
CADE1407	Engineering CAD	5
CADE1410	Sections and Auxiliary Views	2
CADE1420	Manufacturing Processing and Design	2
CADE2400	Engineering CAD II	5

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Understand and apply orthographic projections and dimensioning techniques.

- Create orthographic drawings with the use of CAD.
- Create section and auxiliary drawings with the use of CAD.

Geopak – 16 credits Certificate Program

The Geopak certificate offering at Lake Superior College prepares students to use Microstation's Geopak software for civil design projects. Emphasis is placed on the development of computer design skills and data handling techniques through hands-on coursework. Students will create site, highway, and subdivision plans from actual survey data. This certificate program will allow students to earn an award that supplements their existing educational path or can be taken as a separate certificate leading toward possible employment.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CETT1500	Introduction to Microstation/Geopak	4
CETT1505	Geopak Design	4
CETT1510	Geopak Survey	3
CADE2700	Microstation I	5

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Demonstrate the ability to create drawings using Microstation
 - Develop the ability to use survey data to create civil design projects for roads, sites, and subdivisions.

Microstation (CAD) – 16 Credits Certificate Program

This certificate is an advanced program requiring, at minimum, completion of the Advanced Autocad course, experience in the field, or instructor approval. Ideally participants will have completed the CAD Engineering Technology degree or diploma. The program builds on the skills gained in the diploma and/or associate degree program and is also an appropriate upgrade for those currently employed in the field. Microstation is an advanced alternative computer aided design software package that is gaining acceptance in the Civil Technology and Architectural fields.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CADE1405	Introduction to CAD Engineering	1
CADE1407	Engineering CAD	5
CADE2700	Microstation I	5
CADE2710	Microstation II	5

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Create engineering drawings using advanced CAD applications

Electronic Engineering Technology: Computer Support – 72 Credits Associate in Applied Science Degree Program

The A.A.S. Electronic Engineering Technology program with Computer Support emphasizes educates students in the areas of basic analog and digital electronic theory and analysis. It also teaches students to repair and upgrade personal computers as well as set up and maintain various types of computer networks. This provides students with

the skills required to obtain jobs as computer/network technicians in a variety of industries and businesses.

Course #	Course Title	Credits
CIS1521	Microcomputer Operating Systems	3
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering & Surface Mount Lab	1
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1450	Microcontroller Theory	4
ELTN1455	Microcontroller Lab	2
ELTN2400	CET Exam Preparation	1
ELTN2410	Media & Cabling Theory	1
ELTN2415	Media & Cabling Lab	2
ELTN2465	PC Technician: Hardware	3
ELTN2505	Networking + Service and Support	3
ELTN2515	COMPTIA A+ Certification Exam Prep	1

Minnesota Transfer Curriculum:

Communications	3
Math/Science	3
Social/Behavioral Science or Humanities	3

Non-designated	9
Other Technical Credits:	
Technical Electives	18

Approved Electives:

ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN1460	Programmable Controllers	2
ELTN2401	FCC Exam Prep	1
ELTN2420	Robotics	2
ELTN2430	Introduction to Instrumentation	2
ELTN2440	Motor Speed Controllers	2
ELTN2450	Programmable Controller Applications	2
ELTN2477	Electronics Internship	1-4
ELTN2480	Communications Electronics	5
ELTN2485	Communications Electronics Lab	5
ELTN2999	Special Topics in Electronics	1-3
ELEC2440	National Electrical Code I	2
ELEC2471	Industrial Wiring	2
ELEC2472	Industrial Wiring Lab	2
ELEC2510	National Electric Code II	2
COMM1601	HR-The Individual in Career or Classroom	1

Other courses may be allowed as electives with advisory approval.

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
 - Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
 - Understand basic circuit analysis techniques
 - Troubleshoot and repair common electronic circuits
 - Install various computer operating systems
 - Install and configure various PC hardware components, e.g. memory, hard drives, modems, and network cards
 - Install and configure LANs

- Be proficient at cabling using appropriate standards and media

Electronic Engineering Technology-Industrial Controls – 72 Credits

Associate in Applied Science Degree Program

The A.A.S. Electronics Engineering Technology program with Industrial Controls Emphasis educates students in the areas of basic electronic theory and analysis, industrial control principles and practices, and provides students with the skills required to obtain jobs as industrial electronic technicians in a wide variety of industries. Training includes basic theory and extensive hands-on experience with industrial wiring practices, motors and motor controllers, programmable controllers, and a variety of industrial instrumentation.

Course #	Course Title	Credits
ELEC2440	National Electrical Code I	2
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering & Surface Mount Lab	1
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN1460	Programmable Controllers	2
ELTN1470	Systematic Troubleshooting	1
ELTN1500	Practical PC Maintenance	3
ELTN2400	CET Exam Preparation	1
ELTN2410	Media & Cabling Theory	1
ELTN2415	Media & Cabling Lab	2

Minnesota Transfer Curriculum:

Communications	3
Math/Science	3
Social/Behavioral Science or Humanities	3
Non-designated	9

Other Technical Credits:	
Technical Electives	18
Approved Electives:	

Course #	Course Title	Credits
CIS1521	Microcomputer Operating Systems	3
ELTN1450	Microcontroller Theory	4
ELTN1455	Microcontroller Lab	2
ELTN2401	FCC Exam Prep	1
ELTN2420	Robotics	2
ELTN2430	Introduction to Instrumentation	2
ELTN2440	Motor Speed Controllers	2
ELTN2450	Programmable Controller Applications	2
ELTN2465	PC Technician: Hardware	3
ELTN2477	Electronics Internship	1-4
ELTN2505	Networking + Service and Support	3
ELTN2515	COMPTIA A+ Certification Exam Prep	1
ELTN2999	Special Topics in Electronics	1-3
ELEC2471	Industrial Wiring	2
ELEC2472	Industrial Wiring Lab	2
ELEC2510	National Electric Code II	2
COMM1601	HR-The Individual in Career or Classroom	1

Minnesota Transfer Curriculum:	
Communications	3
Math/Science	3
Social/Behavioral Science or Humanities	3
Non-designated	9

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
 - Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
 - Understand basic circuit analysis techniques
 - Troubleshoot and repair common electronic circuits
 - Install, program, and troubleshoot programmable controllers (PLC's) used in industrial plants
 - Install, troubleshoot, and configure AC and DC motors
 - Install and configure various PC hardware components, e.g. memory, hard drives, modems, and network cards
 - Be proficient at cabling using appropriate standards and media

Electronic Engineering Technology-Wireless Communications – 72 Credits

Associate in Applied Science Degree Program

The A.A.S. Electronic Engineering Technology program with wireless communications emphasis educates students in the areas of basic analog and digital electronic theory and analysis. It also teaches students the essential topics underlying wireless electronic communications theory and practices. These topics are then related to specific modern wireless communications systems. This provides students with the skills required to obtain jobs as electronic communications technicians in a variety of industries.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering and Surface Mount Lab	1
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1470	Systematic Troubleshooting	1
ELTN1500	Practical PC Maintenance	3
ELTN2400	CET Exam Prep	1
ELTN2401	FCC Exam Prep	1
ELTN2410	Media and Cabling Theory	1
ELTN2415	Media and Cabling Lab	2
ELTN2480	Communications Electronics	5
ELTN2485	Communications Electronics Lab	5

Technical Electives 19

Minnesota Transfer Curriculum:	
Communication	3
Math/Science	3
Social/Behavioral Science or Humanities	3
Non-designated	9

Approved Electives:

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
CIS1521	Microcomputer Operating System	3
ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN1450	Microcontroller Theory	4



ELTN1455	Microcontroller Lab	2
ELTN1460	Programmable Controllers	2
ELTN2420	Robotics	2
ELTN2430	Introduction to Instrumentation	2
ELTN2440	Motor Speed Controllers	2
ELTN2450	Programmable Control Applications	2
ELTN2465	PC Technician: Hardware	3
ELTN2477	Electronics Internship	1-4
ELTN2505	Networking + Service and Support	3
ELTN2515	COMPTIA A+ Certification Exam Prep	1
ELTN2999	Special Topics in Electronics	1-3
ELEC2440	National Electrical Code I	2
ELEC2471	Industrial Wiring	2
ELEC2472	Industrial Wiring Lab	2
ELEC2510	National Electric Code II	2
COMM1601	HR-The Individual in Career or Classroom	1

Program Outcomes

- The program is designed to provide students with the knowledge and ability to:
- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
 - Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
 - Understand basic circuit analysis techniques
 - Troubleshoot and repair common electronic circuits
 - Understand various types of analog and digital modulation schemes used in modern electronic communications
 - Understand basic antenna and EM wave propagation theory as they relate to things such as antenna gain, polarization, and radiation patterns as well as EM wave attenuation, reflection, and refraction
 - Install and configure various PC hardware components, e.g. memory, hard drives, modems, and network cards
 - Be proficient at cabling using appropriate standards and media

Electronic Technology – 64 Credits Diploma Program

The Electronic Technology program is a comprehensive technician training program in which students are trained to work in many areas of electronics including microcomputers, communications systems, and industrial and robotic systems. Training includes extensive hands-on experience in addition to fundamental knowledge of principles and practices.

Course #	Course Title	Credits
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN1420	Soldering & Surface Mount Lab	1
ELTN1430	Solid-State Theory	3
ELTN1435	Solid-State Lab	2
ELTN1450	Microcontroller Theory	4
ELTN1455	Microcontroller Lab	2
ELTN1460	Programmable Controllers	2
ELTN1470	Systematic Troubleshooting	1
ELTN1500	Practical PC Maintenance	3
ELTN2400	CET Exam Prep	1
COMM1602	HR-Team-building in Career or Classroom	1
ADSC1420	Business Communications	3

Other Technical Credits:

Approved Programs Electives 22

Approved Electives:

Course #	Course Title	Credits
ELTN1440	AC/DC Rotating Equipment	4
ELTN1445	AC/DC Rotating Equipment Lab	4
ELTN2401	FCC Exam Prep	1
ELTN2410	Media and Cabling Theory	1
ELTN2415	Media and Cabling Lab	2
ELTN2420	Robotics	2
ELTN2430	Introduction to Instrumentation	2
ELTN2450	Programmable Controller Applications	2
ELTN2465	PC Technician: Hardware	3
ELTN2477	Electronics Internship	1-4
ELTN2480	Communications Electronics	5
ELTN2485	Communications Electronics Lab	5
ELTN2500	Servomechanisms and Synchros	2
ELTN2505	Networking + Service and Support	3
ELTN2515	COMPTIA A+ Certification Exam Prep	1
SMGT1520	Work Teams	1
COMM1601	HR-The Individual in Career or Classroom	1
CIS1521	Microcomputer Operating Systems	3

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
- Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
- Understand basic circuit analysis techniques
- Troubleshoot and repair common electronic circuits
- Install and configure various PC hardware components, e.g. memory, hard drives, modems, and network cards

Power Limited – 30 Credits

Certificate Program

The Power Limited Certificate focuses on how to design and build a standard-based structured cabling system for residential premises. Students will learn how to design cabling pathways and spaces, as well as which media to use in various applications such as voice, video, data, security and smart home devices. Furthermore, students will design backbone and horizontal distribution systems and cover and apply the National Electrical Code and

ANSI/TIA/EIA standards as appropriate. Application exercises using blueprints are used to enhance the learning experience.

Course #	Course Title	Credits
ELTN1400	Basic Electricity Theory	5
ELTN1405	Basic Electricity Lab	3
ELTN1410	Digital Basics	1
ELTN1415	Digital Lab	1
ELTN2410	Media and Cabling Theory	1
ELTN2415	Media and Cabling	2
ELTN1600	Basic Telecommunications Theory	2
ELTN1610	System Planning/Blueprints/CAD	2
ELTN1620	NEC/Conduit/Pathways	2
ELTN1625	NEC/Conduit/Pathways Lab	3
ELTN1630	PLT Control Systems	3
ELTN1635	PLT Control Systems Lab	3
ELTN1640	PLT Networking and Support	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Apply the National Electric Code and ANSI/TIA/EIA standards as appropriate to home networks.
- Design cabling pathways for residential applications.
- Build a standard based structural cabling system for residential applications.

Machine Technology Careers

CNC Machine Programmer – 72 Credits Associate in Applied Science Degree

The CNC Machine Programmer program is designed to prepare the student for employment as a CNC Machinist/Programmer. Skill development includes performing basic floor programming to produce a part to specifications, setup and operation of CNC machines, instruction in inspection and statistical process control, and program parts designed using a CAD/CAM computer system.

Course #	Course Title	Credits
MTCC1400	Blueprint Reading I	2
MTCC1410	Machine Shop Safety & Power Saws	1
MTCC1430	Basic Engine Lathes I	3
MTCC1440	Vertical Milling Machines I	3
MTCC1450	Engine Lathe II	3
MATH1500	Applied Algebra and Trigonometry	4
MTCC2400	Vertical Milling Machines II	3
MTCC2410	Basic CAD	2
MTCC2430	Inspection & Geometric Tolerancing	3
MTCC2440	CNC Basic Programming	1
MATH1535	Applied Geometry for Technicians	2
MTCC1505	Surface Grinder I	2
MTCC1520	Cylindrical Grinding	1
MTCC2460	Tool & Cutter Grinding	2
MTCC2470	Basic CAM	3
MTCC2500	CNC Mill (Conversational/G Code)	3
MTCC2510	CNC Turning/Slant	3
MTCC2540	CNC Machine Center (3 axis)	3
MTCC2550	CNC Turning/Kit	3
MTCC2560	Advanced CNC Mill (4th Axis)	4
MTCC2570	Wire EDM	3

General Education Requirements (18 credits)

Communication elective 3



Natural Sciences/Math elective	3
History, Social/Behavioral Sciences or Humanities elective	3
General Education – Other	9

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Perform a basic setup and operate different types of manual metal working machines
- Write basic programs and operate different types of CNC metal working machines
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM computer programs to generate CNC programs to be used on machine tools
- Interpret all basic drawings and blueprints
- Build basic machine parts and tools.

CNC Machine Programmer – 64 Credits Diploma Program

The CNC Machine Programmer program is designed to prepare the student for employment as a CNC Machinist/Programmer. Skill development includes performing basic floor programming to produce a part to specifications, setup and operation of CNC machines, instruction in inspection and statistical process control, and program parts designed using a CAD/CAM computer system.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
MTCC1400	Blueprint Reading I	2
MTCC1410	Machine Shop Safety & Power Saws	1
MTCC1420	Bench Work, Math, & Measurement	1
MTCC1430	Basic Engine Lathes I	3
MTCC1440	Vertical Milling Machines I	3
MTCC1450	Engine Lathe II	3
MTCC1460	Blueprint Reading II	2
MTCC1470	Industrial Machinery's Handbook	1
MTCC1500	Horizontal Milling Machines	1
MTCC1505	Surface Grinder I	2
MTCC1510	Heat Treating	1
MTCC1520	Cylindrical Grinding	1
MTCC2400	Vertical Milling Machines II	3
MTCC2410	Basic CAD	2
MTCC2420	Handscrew Machine	1
MTCC2430	Inspection & Geometric Tolerancing	3

MTCC2440	CNC Basic Programming	1
MTCC2450	Estimating & Processing	1
MTCC2460	Tool & Cutter Grinding	2
MTCC2470	Basic CAM	3
MTCC2500	CNC Mill (Conversational G Code)	3
MTCC2510	CNC Turning/Slant	3
MTCC2530	Jig & Fixture Construction	2
MTCC2540	CNC Machine Center (3 axis)	3
MTCC2550	CNC Turning/Kit3	
MTCC2560	Advanced CNC Mill (4th Axis)	4
MTCC2570	Wire EDM	3
MATH1500	Applied Algebra and Trigonometry	4+
MATH1535	Applied Geometry for Technicians	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Perform a basic setup and operate different types of manual metal working machines
- Write basic programs and operate different types of CNC metal working machines
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM computer programs to generate CNC programs to be used on machine tools
- Interpret all basic drawings and blueprints
- Build basic machine parts and tools.

Machine Tool Operator – 29 Credits Certificate Program

The operator course is designed to provide students with training or updating in basic machine tool operation. The program provides students with a basic background in turning, milling, safety, bench work, and the use of basic measuring tools. The student can take more advanced elective courses from the machine tool careers curriculum.

<u>Course #</u>	<u>Course Title</u>	<u>Credits</u>
MTCC1400	Blueprint Reading I	2
MTCC1410	Machine Shop Safety & Power Saws	1
MTCC1420	Bench Work, Math, & Measurement	1
MTCC1430	Basic Engine Lathes I	3
MTCC1440	Vertical Milling Machines I	3
MTCC1450	Engine Lathe II	3
MTCC2400	Vertical Milling Machines II	3

Other Technical Electives:

Approved Electives 13

Approved Electives: 13 additional credits listed under the CNC Machine Programmer program.

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Perform a basic setup and operate different types of manual metal working machines
- Write basic programs and operate different types of CNC metal working machines
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM computer programs to generate CNC programs to be used on machine tools
- Interpret all basic drawings and blueprints
- Build basic machine parts and tools.

Moldmaker/Toolmaker – 64 Credits

Diploma Program

The Moldmaker/Toolmaker program is designed to prepare the student for employment as a moldmaker. Skill development includes interpreting mold designs, building mold components as per design, running mold for proper operation, and finished part. CNC and CAD/CAM computer stations will be used to assist in design and engineering of mold components.

Course #	Course Title	Credits
MTCC1400	Blueprint Reading I	2
MTCC1410	Machine Shop Safety & Power Saws	1
MTCC1420	Bench Work, Math, & Measurement	1
MTCC1430	Basic Engine Lathes I	3
MTCC1440	Vertical Milling Machines I	3
MTCC1450	Engine Lathe II	3
MTCC1460	Blueprint Reading II	2
MTCC1470	Industrial Machinery's Handbook	1
MTCC1505	Surface Grinder I	2
MTCC1510	Heat Treating	1
MTCC2400	Vertical Milling Machines II	3
MTCC2410	Basic CAD	2
MTCC2430	Inspection & Geometric Tolerancing	3
MTCC2440	CNC Basic Programming	1
MTCC2460	Tool & Cutter Grinding	2
MTCC2470	Prototype CAD CAM	3
MTCC2500	CNC Mill (Conversational)	3
MTCC2520	Conventional EDM	2
MTCC2540	CNC Machine Center (3 axis)	3
MTCC2560	CNC Mill Vertical & Horizontal	4
MTCM2400	Mold Construction	1
MTCM2410	Mold Building I	4
MTCM2420	Milling Machines III & Opticdress	2
MTCM2430	Mold Building II	5
MATH1500	Applied Algebra and Trigonometry	4
MATH1535	Applied Geometry for Technicians	2

Other Liberal or Technical Electives: 2

Approved Electives:

COMM1601	HR-The Individual in Career or Classroom	1
ENGL1000	Professional Communications	3
MTCC1405	Professional Development	1
MTCC2570	Wire EDM	3
MTCC2579	Special Topics	1-6
COMM1602	HR-Team-building in Career or Classroom	1
SMGT1520	Work Teams	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Perform a basic setup and operate different types of manual metal working machines
- Write basic programs and operate different types of CNC metal working machines
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM computer programs to generate CNC programs to be used on machine tools
- Interpret all basic drawings and blueprints
- Build basic machine parts, tools and/or plastic injection molds

Transportation Careers

Auto Body Technology – 33 Credits

Diploma Program

The Auto Body Technology program allows students to gain the information and develop skills needed to repair and refinish collision damaged automobiles. Courses cover the areas of body and frame straightening, body panel replacement, dented panel repair, refinishing, welding techniques, plastic panel repair, interior and exterior trim service, glass replacement, and mechanical system service. Instruction includes classroom lectures and demonstrations as well as hands-on projects in the LSC auto body lab. Students working in the lab use state-of-the-art equipment and materials to make actual repairs on collision damaged vehicles.

Course #	Course Title	Credits
ABTE1415	Auto Body Welding	3
ABTE1425	Simple Dent Repair	3
ABTE1435	Introduction to Refinishing	3
ABTE1440	Auto Trim & Glass Service	3
ABTE1445	Auto Mechanical Systems	3
ABTE1455	Automotive Refinishing	3
ABTE1465	Collision Damage Repair	3
ABTE1475	Collision Damage Replacement	3
ABTE1485	Unibody & Frame Repair	2
ABTE1495	Auto Body Plastic Repairs	2
ADSC1711	Computer Essentials	1
ENGL6000	Trade Communications	2
MATH1440	Occupational Math/Transportation	1
COMM1602	HR-Team-building in Career or Classroom	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate an understanding of automobile body repair welding materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile body panel dent repair materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile body refinishing materials, tools and equipment, surface preparation procedures, and spray techniques
- Demonstrate an understanding of automobile trim and hardware service materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile window glass service materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile mechanical systems operation and mechanical component removal, replacement, and adjustment materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile body panel replacement materials, tools and equipment, and procedures
- Demonstrate an understanding of automobile body/frame alignment tools and equipment and straightening procedures
- Demonstrate an understanding of automobile plastic body panel repair materials, tools and equipment, and procedures
- Demonstrate safe and proper use of automobile body repair hand and power tools, hazardous materials, and personal protective equipment



**Auto Service Technology – 64 Credits
Diploma Program**

In the Auto Service Technology program, students will have the opportunity to learn skills to prepare for entry-level positions as automotive technicians. These skills will also be helpful in preparing for A.S.E. (Automotive Service Excellence) certification. Courses of instruction cover all systems of the automobile, including basic operation and parts identification with the objective of developing diagnostic skills. Automotive service technicians, in addition to enjoying working with their hands, must also have the ability to systematically diagnose technical automotive problems.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ABTE1405	Basic Welding	2
ADSC1711	Computer Essentials	1
ASTE1400	Intro to Transportation	3
ASTE1410	Air Conditioning	2
ASTE1430	Auto Electrical Fundamentals	3
ASTE1440	Body Electrical & Electronics	3
ASTE1450	Engine Service	5
ASTE1460	Basic Fuel System Service	2
ASTE1470	Basic Engine Driveability	3
ASTE1480	Basic Hydraulics	1
ASTE1500	Charging & Starting Service	3
ASTE2400	Suspension & Steering Repair	3
ASTE2410	Basic Wheel Alignment	2
ASTE2420	Advanced Wheel Alignment	2
ASTE2430	Clutch & Differential	3
ASTE2440	Brakes	4
ASTE2450	Transmission Theory	3
ASTE2460	Transmission Lab	3
ASTE2470	Intro to Automotive Computers	3
ASTE2480	Advanced Air conditioning	2
ASTE2500	Fuel Systems II	3
ASTE2510	Advanced Engine Driveability	4
ENGL6000	Trade Communications	2
MATH1440	Occupational Math/Transportation	1

COMM1602 HR-Team-building in Career or Classroom

1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate the skills and knowledge necessary to utilize service literature
- Demonstrate the skills and knowledge to perform repairs following environmental and ethical guidelines
- Exhibit the safety procedures and practices necessary to work efficiently and professionally in the automotive industry
- Demonstrate the ability to maintain and repair tools and equipment in the automotive shop
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive heating and air conditioning systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive electrical systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive drive train systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive steering and suspension systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive brake systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive driveability systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive engine systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive transmission systems

**Auto Service Technology – 72 Credits
Associate in Applied Science Degree Program**

In the Automotive Service Technology programs, students will have the opportunity to learn skills to prepare for entry-level positions as automotive technicians. These skills will also be helpful in preparing for A.S.E. (Automotive Service Excellence) certification. Courses of instruction cover all systems of the automobile, including basic operation and parts identification with the objective of developing diagnostic skills. Automotive service technicians, in addition to enjoying working with their hands, must also have the ability to systematically diagnose technical automotive problems.

The A.A.S. program is similar in content to the diploma programs, but also includes 18 credits of liberal education, which are intended to diversify the students' training and enhance transfer opportunities to other institutions of higher learning.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ABTE1405	Basic Welding	2
ADSC1711	Computer Essentials	1
ASTE1400	Intro to Transportation	3
ASTE1410	Air Conditioning	2
ASTE1430	Auto Electrical Fundamentals	3
ASTE1440	Body Electrical & Electronics	3
ASTE1450	Engine Service	5
ASTE1460	Basic Fuel System Service	2
ASTE1470	Basic Engine Driveability	3
ASTE1480	Basic Hydraulics	1
ASTE1500	Charging & Starting Service	3

ASTE2400	Suspension & Steering Repair	3
ASTE2410	Basic Wheel Alignment	2
ASTE2420	Advanced Wheel Alignment	2
ASTE2430	Clutch & Differential	3
ASTE2440	Brakes	4
ASTE2470	Intro to Automotive Computers	3
ASTE2480	Advanced Air Conditioning	2
ASTE2500	Fuel Systems II	3
ASTE2510	Advanced Engine Driveability	4

Minnesota Transfer Curriculum:

Communications	3
Math/Science	3
Social Behavioral Science	3
Non-designated	9

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate the skills and knowledge necessary to utilize service literature
- Demonstrate the skills and knowledge to perform repairs following environmental and ethical guidelines
- Exhibit the safety procedures and practices necessary to work efficiently and professionally in the automotive industry
- Demonstrate the ability to maintain and repair tools and equipment in the automotive shop
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive heating and air conditioning systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive electrical systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive drive train systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive steering and suspension systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive brake systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive driveability systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive engine systems

Brake and Suspension Technician – 27 Credits Certificate Program

A Brake and Suspension Technician is a technician who uses problem solving and critical thinking skills along with a working knowledge of brake and suspension components to diagnose and repair a variety of vehicle handling and braking problems.

The courses will be provided by qualified Lake Superior College faculty and will be offered at varied times throughout the day and evening. All credits will transfer into the Automotive Service Technology program and/or can serve as preparation to A.S.E. (Automotive Service Excellence) certification.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ABTE1405	Basic Welding	2
ADSC1711	Computer Essentials	1
ASTE1400	Intro to Transportation	3
ASTE1430	Auto Electrical Fundamentals	3
ASTE1440	Body Electrical & Electronics	3

ASTE1480	Basic Hydraulics	1
ASTE2400	Suspension and Steering Repair	3
ASTE2410	Basic Wheel Alignment	2
ASTE2420	Advanced Wheel Alignment	2
ASTE2440	Brakes	4
ENGL6000	Trade Communications	2
MATH1440	Occupational Math/Transportation	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate the skills and knowledge necessary to utilize service literature
- Demonstrate the skills and knowledge to perform repairs following environmental and ethical guidelines
- Exhibit the safety procedures and practices necessary to work efficiently and professionally in the automotive industry
- Demonstrate the ability to maintain and repair tools and equipment in the automotive shop
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive electrical systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive steering and suspension systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive brake systems

Driveability Technician – 29 Credits Certificate Program

A Driveability Technician is a technician who uses problem solving and critical thinking skills, along with a working knowledge of all vehicle systems, to diagnose and repair a variety of vehicle driveability problems. The courses will be provided by qualified Lake Superior College faculty and will be offered at varied times throughout the day and evening. All credits will transfer into the Automotive Service Technology program and/or can serve as preparation for ASE certification.

<u>Course ID#</u>	<u>Course Title</u>	<u>Credits</u>
ADSC1711	Computer Essentials	1
ASTE1430	Auto Electrical Fundamentals	3
ASTE1450	Engine Service	5
ASTE1460	Basic Fuel System Service	2
ASTE1470	Basic Engine Driveability	3
ASTE1500	Charging & Starter Systems	3
ASTE2470	Intro to Automotive Computers	3
ASTE2500	Fuel Systems II	3
ASTE2510	Advanced Engine Driveability	4
ENGL6000	Trade Communications	2

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Demonstrate the skills and knowledge necessary to utilize service literature
- Demonstrate the skills and knowledge to perform repairs following environmental and ethical guidelines
- Exhibit the safety procedures and practices necessary to work efficiently and professionally in the automotive industry
- Demonstrate the ability to maintain and repair tools and equipment in the automotive shop
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive electrical systems

- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive driveability systems
- Demonstrate the skills and knowledge necessary for diagnosis and repair of automotive engine systems

**Professional Pilot – 62 Credits
Associate in Applied Science Degree Program**

The Professional Pilot program is designed to meet the needs of students who plan a career as a pilot in commercial aviation. The program leads to F.A.A. certification as a commercial pilot with an instrument rating. Graduates may also transfer to a four-year school to complete a B.S. Degree.

Applicants should be aware that certain standards for certification are required by the F.A.A. All applicants must be able to hold either a 1st, 2nd, or 3rd class medical certificate. Standards vary according to certificate/rating sought. A security clearance is required by TSA. Contact the program director for current standards.

Occupational Titles: Air Freight Pilot, Commuter Airline Pilot, Corporate Pilot, Flight Instructor.

Course #	Course Title	Credits
AVIA1211	Private Pilot: Ground	4
AVIA1212	Private Pilot: Flight Lab	2
AVIA1215	Introduction to Professional Aviation	2
AVIA1221	Commercial Pilot: Ground	2
AVIA1222	Commercial Pilot: Flight Lab I	1
AVIA1225	Aircraft Systems and Power Plant	2
AVIA2215	Aviation Safety	2
AVIA2223	Commercial Pilot: Flight Lab II	4
AVIA2224	Commercial Pilot: Flight Lab III	3
AVIA2225	Management of Aviation Service Operations	2
AVIA2231	Instrument Pilot: Ground	3
AVIA2232	Flight Instructor: Ground	3
CIS1400	Introduction to Computers	2
FIRE1556	EMS First Responder	3
FIRE1565	Wilderness Survival	2
ENGL1106	College Composition I	3
ENSC1300	Meteorology	3
PHYS1001	Fundamental Concepts of Physics	4

Communication Elective	3
Humanities Elective	3
Social/Behavioral Science	3
General Education Elective	9

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Pass the Federal Aviation Administration Knowledge and Flight tests for a particular FAA Pilot Certificate or Rating
- Understand the historical developments of the aviation industry
- Be familiar with the various mechanical systems found on typical light aircraft that they will likely be operating
- Conduct safe flight operations as it pertains to human factors, aircraft design, environmental factors, industry practices and procedures, evolving technologies, accident investigations and conclusions
- Understand and define the elements of airport operations and their importance to the success, stability and future of the business, community and the aviation industry



- Meet the requirements to qualify for Phillips 66 Flight Line Training Certification

Truck Driving (Over-the-Road) – 15 Credits

With the ever increasing demand for professional truck drivers, student job placement from the Lake Superior College program is excellent. Training will consist of tractor-trailer basic and advanced operation techniques, safety, log books, air brakes adjustment certification and weight distribution.

Upon completion of this program, the student will have obtained a class A Commercial Drivers License and will gain the skills and knowledge to become a professional truck driver.

Course #	Course Title	Credits
TDT1800	Basic Vehicle Operation and Control	7
TDT1830	Advanced Driving Techniques	2
TDT1850	Truck Driving Internship	4-6

Electives:

ADSC1711	Computer Essentials	1
MATH1521	Calculator Technology (TI-30)	1

Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Obtain a commercial drivers license (CDL)
- Practice defensive driving techniques as set forth by the National Safety Council

**Wilderness Pilot – 30 Credits
Certificate Program**

The Wilderness Pilot Certificate is designed to meet the needs of students who plan a career as a pilot in commercial aviation or wilderness flying. Flying experience beyond this program is required before pilots are qualified to do extensive wilderness flying. A special application is required for this program and is open only to those with extensive flight training or at least an Associates Degree.

Applicants should be aware that the FAA requires certain standards for certification. All applicants must be able to hold a 1st, 2nd, or 3rd class medical certificate. Standards vary according to certificate/rating sought. A security

2005-2007 Catalog

clearance is required by TSA. Contact the program coordinator for current standards.

Occupational Titles: Co-Pilot, Charter Pilot

Course #	Course Title	Credits
AVIA1211	Private Pilot: Ground	4
AVIA1212	Private Pilot: Flight Lab	2
AVIA1215	Introduction to Professional Aviation	2
AVIA1221	Commercial Pilot: Ground	2
AVIA1222	Commercial Pilot: Flight Lab I	1
AVIA1225	Aircraft Systems and Power Plant	2
AVIA2215	Aviation Safety	2
AVIA2224	Commercial Pilot: Flight Lab III	3
AVIA2225	Management of Aviation Service Operations	2
AVIA2223	Commercial Pilot: Flight Lab II	4
AVIA2231	Instrument Pilot: Ground	3
ENSC1300	Meteorology	3

Additional Elective Recommended Classes:

AVIA2232	Flight Instructor: Ground	3
FIRE1556	EMS First Responder	3



Course Descriptions



Auto Body Technology

ABTE1405 Basic Welding 2 credits (F)
This course provides the student with an understanding of basic welding fundamentals and the ability to properly and safely use gas and electric welding equipment to perform welding and cutting procedures in the flat position. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

ABTE1415 Auto Body Welding 3 credits (F)
This course provides the student with an understanding of auto body repair welding fundamentals and the ability to properly and safely use gas and electric welding equipment to perform welding and cutting procedures in flat, vertical, and overhead positions. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ABTE1425 Simple Dent Repair 3 credits (F)
This course provides the student with an understanding of automobile dent repair fundamentals and the ability to properly and safely perform simple dent repair procedures on collision damaged automobile body panels. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ABTE1435 Introduction to Refinishing 3 credits (F)
This course provides the student with an understanding of automobile refinishing fundamentals and the ability to properly and safely use refinishing materials and equipment to perform basic surface preparation and material application procedures. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ABTE1440 Auto Trim & Glass Service 3 credits (F)
This course provides the student with an understanding of automobile trim and glass service techniques and the ability to properly and safely perform trim and glass removal and replacement procedures. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ABTE1445 Auto Mechanical Systems 3 credits (F)
This course provides the student with an understanding of automobile mechanical systems and the ability to properly and safely perform mechanical component removal, replacement, and adjustment procedures related to auto collision repair. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ABTE1455 Automotive Refinishing 3 credits (S)
This course provides the student with an understanding of automobile overall refinishing techniques and the ability to properly and safely use refinishing materials and equipment to perform overall refinishing procedures on project vehicles. (Prerequisites: ABTE1435 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ABTE1465 Collision Damage Repair 3 credits (S)
This course provides the student with an understanding of collision damage repair techniques and the ability to properly and safely perform pounding, pulling, and pushing procedures to repair collision damaged body panels. (Prerequisites: ABTE1425 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ABTE1475 Collision Damage Replacement 3 credits (S)
This course provides the student with an understanding of automobile body panel replacement techniques and the ability to properly and safely perform cosmetic and structural panel replacement procedures. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ABTE1485 Unibody & Frame Repair 2 credits (S)
This course provides the student with an understanding of unibody and frame alignment techniques and the ability to properly and safely perform measuring, anchoring, and straightening procedures on unibody and frame vehicles. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

ABTE1495 Auto Body Plastic Repairs 2 credits (S)
This course provides the student with an understanding of automotive plastic repair techniques and the ability to properly and safely perform automobile plastic repairs. (Prerequisites: ABTE1435 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ABTE2999 Special Topics in Auto Body Technology 1-3 credits (I)
Study of special topics in auto body technology. Special course topics will be announced in the class schedule.

Accounting

ACCT1400 Accounting Math 2 credits (F/S)
This course (aka Business Math) is designed to teach the student how to make commonly occurring business calculations. Topics include the mathematics of buying and selling, time value of money, simple and compound interest calculations, payroll calculations, credit card and revolving credit agreements, depreciation methods, and inventory methods. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

ACCT1420 Introduction to Financial Accounting (Accounting Majors) 3 credits (F/S)
Study the concepts of financial accounting and external reporting, including the nature and measurement of assets, liabilities, equities, revenues, and expenses. Emphasis placed on use and understanding of external financial statements. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT1500 Personal Finance 3 credits (F/S)
This course is designed to help the student plan for a successful financial future. Individuals are encouraged to plan their financial futures by organizing and managing their personal financial resources. Protection of financial resources is also stressed. The importance of effective investment and the growth of financial resources is emphasized. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

ACCT1520 Accounting Principles & Fundamentals 3 credits (F/S)

This course focuses on the analysis of the fundamental accounting equation using a systematic process to record, classify, measure, and report economic data. Students use columnar journals, posting, subsidiary ledgers, and worksheets to complete the accounting cycle and prepare financial statements. Emphasis is on the balance sheet and income statement. Use of computerized practice set is also required. (Prerequisites: College-level math and ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT1530 Payroll Accounting 3 credits (S)

This course covers various federal and state laws pertaining to the computation of salaries, wages, and related taxes. Topics include the preparation of employment records, payroll registers, time cards, employee earnings records, and state and federal reports. A comprehensive payroll project will be completed. (Prerequisites: ACCT1420, or ACCT1520, or concurrent enrollment) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT1550 Tax Accounting I 3 credits (S)

This course is an explanation and interpretation of the Internal Revenue Code as it relates to the preparation and filing of individual, state, and federal income tax returns. (Prerequisites: ACCT1420, or ACCT1520, or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT2410 Spreadsheet Concepts and Applications for Accounting 2 credits (F/S)

This course covers the use of electronic spreadsheets for accounting and other business applications. Various spreadsheet models will be constructed for the purpose of illustrating the different features of the electronic spreadsheets and to provide useful tools for the solving of selected accounting problems. (Prerequisites: ADSC1430 and ACCT1420 or ACCT1520) (1 hr lec/2 hrs lab/0 hrs OJT)

ACCT2420 Intermediate Accounting I 4 credits (F)

This course is a comprehensive study of accounting theory and concepts with an analysis of the influence on financial accounting by various boards, associations, and governmental agencies. Topics include the income statement, balance sheet, statement of changes in financial position, and revenue and expense recognition. (Prerequisites: ACCT1420) (3 hrs lec/2 hrs lab/0 hrs OJT)

ACCT2430 Managerial Accounting 3 credits (S)

This course covers decision-making accounting; analysis and use of accounting information from the internal manager's perspective; and manufacturing operations, cost control and pricing decision. (Prerequisites: ACCT1420, or ACCT1520, or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT2450 Tax Accounting II 3 credits (F)

This course provides an explanation and interpretation of the Internal Revenue Code as applied to sole proprietorships and partnerships. Topics include business income and expenses, business tax credits, withholding and payment of estimated taxes, installment sales, and inventories. (Prerequisites: ACCT1550 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ACCT2460 Computerized Applications in Accounting 2 credits (F/S)

This course is an introduction to computerized accounting applications. Topics include computerized general ledger and payroll accounting, accounting applications for accounts receivable and accounts payable, fixed assets accounting, inventory procedures, and a computerized accounting simulation. (Prerequisites: ACCT1420 or ACCT1520) (1 hr lec/2 hrs lab/0 hrs OJT)

ACCT2520 Intermediate Accounting II 4 credits (S)

This course is the second course in a series of two courses. This course continues the comprehensive study of accounting theory and concepts with an analysis of the influence on financial accounting by various boards, associations, and governmental agencies. (Prerequisites: ACCT2420 or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

ACCT2570 Comprehensive Review for Accreditation in Accounting 4 credits (S)

This course is designed to prepare the student for the Comprehensive Examination for Accreditation in Accountancy, as offered by the Accreditation Council for Accountancy and Taxation, an affiliate of the National Society of Public Accountants. For students not planning to take the comprehensive exam, this course serves as a capstone course for review and integration of the common body of knowledge in the accounting field. (Prerequisites: LGST1420, ACCT2420, AND ACCT2450, or instructor's consent) (4 hrs lec/0 hrs lab/0 hrs OJT)

ACCT2675 Fund/Nonprofit Accounting 2 credits (Arr)

This course covers the application of generally accepted accounting principles for state and local governmental units. Topics include accounting for municipalities, public schools, colleges and universities, and hospitals. Also included is accounting for churches, health and welfare organizations, and other nonprofit organizations. (Prerequisites: ACCT1420, or ACCT1520 or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ACCT2999 Special Topics in Accounting 1-3 credits (I)

Study of special topics in accounting. Special course topics will be announced in the class schedule.

Administrative Support**ADSC1415 Keyboarding I** 4 credits (F/S)

This course is designed for the beginning Administrative Support student. The objective of the course is to teach proper typing techniques; to build speed and accuracy; and to utilize a professional word processing system for business applications, such as document storage and retrieval, editing, and document distribution. (Prerequisites: ADSC1710 or equivalent or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1416 Keyboarding II 4 credits (S)

This course is designed for Administrative Support career students as a continuation of skill development started in Keyboarding I. Students will continue the development of keyboarding speed and accuracy and proofreading skills as well as the development of advanced formatting skills. (Prerequisites: ADSC1415 and the ability to keyboard at 40 net wpm) (3 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1420 Business Communications 3 credits (F/S)
 This course covers the development of business communication skills and applying them along with proofreading skills, when creating business documents such as letters, memos, and informal reports. (Prerequisites:  , keyboarding/word processing ability or concurrent enrollment in a keyboarding course) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1421 Business Presentations 3 credits (F/S)
 This course covers development of business communication skills in the following areas: one-to-one communications, small-and large-group presentations, business telephone usage, voice-mail techniques, conducting business meetings, listening skills, and the use of presentation software for enhancing business presentations. (Prerequisites: ADSC1420, ADSC1430 or ADSC1719, concurrent enrollment in either of these courses, or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1422 Business Vocabulary/Proofreading 1 credit (F/S)
 This course aids in the mastery of business vocabulary and spelling skills and their application in proofreading business documents. (Prerequisites:   and ADSC1420 or concurrent enrollment) (1 hr lec/0 hrs lab/0 hrs OJT)

ADSC1425 Calculators/Ten-key 1 credit (F)
 This course covers development and competence using the ten-key numeric touch method. Students will develop speed and accuracy using the touch system. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1430 Integrated Office Software Applications I 3 credits (F/S)
 An introductory course in the basics of computer technology using business application software. Through hands-on use, students will learn fundamental concepts of word processing, spreadsheets, database, and presentation graphics and how they integrate. (Prerequisites: Ability to type a minimum of 20 wpm) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1431 Integrated Office Software Applications II 3 credits (F/S)
 An advanced course in the use of business application software. Students will learn additional advanced concepts of word processing, spreadsheets, database, and presentation graphics and how they integrate. (Prerequisites: ADSC1430) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1432 Office Capstone 2 credits (S)
 This is a capstone course designed to integrate and reinforce skills and knowledge learned in previous courses. Through the use of simulations, students will experience daily routines, make decisions, set priorities, deal with work pressure, develop interpersonal relationships, and become aware of work quality and quantity requirements while utilizing a variety of software. Project emphasis should develop an awareness of work flow. Students will prepare a program portfolio reflecting their personal and academic development throughout their college experience. (Prerequisites: ADSC1430,  ) (0 hrs lec/4 hrs lab/0 hrs OJT)

ADSC1440 General Office Procedures 3 credits (F)
 This course covers topics that develop skill in performing typical office tasks: telephone techniques, telecommunications, mailing, calendaring, meeting arrangements, travel arrangements, office equipment and supplies, time management, stress management, ergonomics and office safety, business ethics, reprographics, and indexing and filing. Students will engage in lab experiences in LSC offices to enhance the material presented from the text. (Prerequisites: ADSC1415, equivalent, or concurrent enrollment in ADSC1415) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1441 Bookkeeping 2 credits (F)
 This course covers the basic accounting cycle for service and merchandising businesses. Topics include the analysis of business transactions, recording transactions in a variety of journals, the preparation of financial reports, and an introduction to computerized accounting. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1442 Records Management 2 credits (S)
 This course is an introduction to the procedures for managing document/records storage systems. Applications include manual and/or electronic storage and retrieval. Topics include records control and retention, storage and retrieval devices, and records management issues and trends. (Prerequisites: ADSC1440, ADSC1511, ADSC1611, or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1450 Machine Transcription 1 credit (S)
 This course covers skill development in transcribing machine-dictated material into usable business documents. Emphasis will be placed on building transcription speed and accuracy; applying punctuation, grammar, and spelling rules; using reference materials; proofreading and correcting errors. (Prerequisites: ADSC1420 or concurrent enrollment, ADSC1415 or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1451 Advanced Machine Transcription 1 credit (S)
 This course covers skill development in transcribing machine-dictated business documents. Emphasis will be placed on editing techniques and efficiently utilizing software and equipment. (Prerequisites: ADSC1450) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1452 General Transcription 2 credits (S)
 This course covers skill development in transcribing machine-dictated material into usable business documents. Emphasis will be placed on building transcription speed and accuracy; applying punctuation, grammar, and spelling rules; using reference materials; proofreading and correcting errors; and efficiently utilizing software and equipment. (Prerequisites: ADSC1420 or concurrent enrollment and ADSC1415 or concurrent enrollment) (0 hrs lec/4 hrs lab/0 hrs OJT)

Term Course Codes:
 (F) = Fall Semester
 (S) = Spring Semester
 (F/S) = Fall & Spring Semesters
 (I) = Intermittent
 (Arr) = Arranged

ADSC1511 Law Office Procedures I 3 credits (F)

This course covers the integration of legal office tasks into the office setting and provides a background study of the branches of the government and the state and federal court systems. Topics include legal duties such as communicating with attorneys and clients, preparing legal correspondence and documents, preparing court documents, maintaining client records, scheduling appointments, legal timekeeping, and integrating these tasks into today's electronic office setting, as well as understanding court structures and related legal terminology. (Prerequisites:  ) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1512 Law Office Procedures II 4 credits (S)

This course covers legal procedures, documents, and terminology relating to Minnesota civil, criminal, and family law. Documents are prepared using word processing and/or transcription. (Prerequisites: ADSC1415, ADSC1450, and ADSC1511) (2 hrs lec/4 hrs lab/0 hrs OJT)

ADSC1515 Law Office Applications 4 credits (F)

This course covers legal procedures, documents, and terminology relating to estate planning and estate administration proceedings, real estate law, and corporate law in Minnesota. Documents are prepared using word processing and/or transcription. (Prerequisites: ADSC1415, ADSC1450, and ADSC1511; or concurrent enrollment) (2 hrs lec/4 hrs lab/0 hrs OJT)

ADSC1517 Computers in the Law Office**3 credits (F/S)**

This course covers practical computer applications in legal organizations and how the computer can be used to make the legal support staff more productive. Various types of software and legal-specific applications are covered. (Prerequisites:  and basic computer skills. (1 hr lec/4 hrs lab/0 hrs OJT)

ADSC1520 Legal Keyboarding 2 credits (F/S)

This course is designed to increase keyboarding speed and accuracy and to further develop keyboarding skills. Students will review basic legal terminology and procedures in various areas of the law while keying legal correspondence and legal documents. (Prerequisites: ADSC1415) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1525 Legal Transcription/Word Processing Applications 2 credits (F/S)

This course covers transcription of dictated and rough-draft legal material into a variety of usable legal documents using word processing software. Emphasis will be on authentic forms and material, editing and proofreading, and correcting errors. (Prerequisites: ADSC 1415 and ADSC 1450) (0 hrs lec/4 hrs lab/0 hrs OJT)

ADSC1530 Law Office Capstone 1 credit (F/S)

This course provides students with the opportunity to apply skills learned throughout the legal program using real-life situations and relevant document-production activities. A hands-on approach is used involving various types of law in conjunction with preparation of a program portfolio reflecting the student's personal and academic development throughout the college experience. (Prerequisites: Completion of or concurrent enrollment in final semester courses or permission of instructor. (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1610 Medical Office Terminology 3 credits (F)

This course introduces word analysis by study of word roots, prefixes, suffixes, and abbreviations common to the medical office/profession. This class has a business focus with emphasis on the written aspect of medical office terminology following medical transcription rules developed by the American Association of Medical Transcriptionists. A heavy focus is placed on vocabulary building techniques to teach the meaning, spelling, correct usage and pronunciation of medical terms for accuracy in transcription, coding, and completion of insurance forms. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ADSC1611 Medical Office Procedures I 3 credits (F)

This introductory course to medical office procedures covers medical office career opportunities, medical ethics and laws, telephone techniques, appointment scheduling, filing, patient records, mail, fee collection, and medical office pharmacology. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ADSC1612 Medical Office Procedures II 3 credits (S)

This course is a continuation of MOPI. Medical topics covered include integration of medical office tasks: bookkeeping, payroll procedures, billing, health insurance, appointment scheduling, patient data input, and CPT and ICD diagnostic coding. (Prerequisites: ADSC1611) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1614 Health Insurance and Billing 3 credits (F)

This course will provide an introduction to the various types of insurance plans, legal considerations involved in claim processing, basic steps in ICD-9-CM and CPT coding, HCPCS, and ADA coding, insurance terminology, and causes for claim rejections. (Prerequisites: ADSC1610 and ADSC1715) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1616 CPT Coding 2 credits (S)

This course provides basic knowledge of CPT coding and the purpose it serves. Basic coding facts, structure of code numbers, abbreviations, symbols, terms, book content, and coding guidelines are covered. This course introduces various types of insurance plans, legal considerations involving coding, insurance terminology, causes for claim rejection, and completion of the CPT coding portion of medical reports and insurance forms. (Prerequisites: ADSC1621) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1621 Medical Office Anatomy & Physiology I 3 credits (F)

This business course covers human body anatomy and physiology with emphasis on spelling accuracy, terminology, abbreviations, and diagnostic and laboratory tests. A heavy focus is placed on the proper pronunciation of medical terms, diagnostic and operative terms for accuracy in medical machine transcription, coding, and insurance form completion. (Prerequisites: ADSC1610 or concurrent enrollment) (3 hrs lec/0 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
 (S) = Spring Semester
 (F/S) = Fall & Spring Semesters
 (I) = Intermittent
 (Arr) = Arranged

ADSC1622 Medical Office Anatomy & Physiology II 3 credits (S)

This business course is a continuation of Medical Office Anatomy & Physiology I. Students continue learning the body systems by studying and analyzing body structure and function with emphasis on spelling accuracy, terminology, abbreviations, and diagnostic and laboratory tests. A heavy focus is placed on proper pronunciation of medical terms, diseases, diagnostic and operative terms for accuracy in medical machine transcription, coding, medical assisting, and insurance courses. Study of diseases, organs, and structures by various anatomical systems will be covered. (Prerequisites: Completion of or concurrent enrollment in ADSC1621) (3 hrs lec/0 hrs lab/0 hrs OJT)

ADSC1625 Medical Machine Transcription 4 credits (S)

This course introduces medical machine transcription and covers transcription of dictated medical material into a variety of usable medical documents. Emphasis is on authentic forms and material, building speed and accuracy, proofreading, advanced editing, and correcting errors. (Prerequisites: ADSC1621, ADSC1415) (3 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1635 Medical Office Diagnostic Coding 4 credits (S)

This course provides basic knowledge of ICD-9 CM and CPT-4 coding and delineates the purposes they serve. Basic coding facts, structure of code numbers, abbreviations, symbols, terms, book content, and coding guidelines are covered. This course introduces various types of insurance plans, legal considerations involving coding, insurance terminology, causes for claim rejection, completion of the coding portion of medical reports, and insurance forms. (Prerequisites: ADSC1621) (3 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1640 Keyboarding Drills/Medical Emphasis 1 credit (F/S)

This course is designed to increase medical keyboarding speed and improve accuracy through personal goal setting, error analysis, and intensive corrective practice work. (Prerequisites: ADSC1624 or ADSC1625, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1710 Introduction to Keyboarding 1 credit (F/S)

This course covers the development of basic keyboarding techniques using the touch method on the computer. Emphasis will be on learning the touch method of typing alphabetic, punctuation, and numeric keys. In addition, skill development will be included. Basic formatting and proofreading skills will be introduced. The keyboarding goal will be the attainment of a minimum rate of 20 net words per minute with accuracy. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1711 Computer Essentials 1 credit (F/S)

A beginning level course in computer literacy. Teaches skills needed to function in a work environment to include: keyboarding, windows, Internet access, and word processing. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1712 Intro to WordPerfect 1 credit (F/S)

This course covers the basic word processing functions students must know in order to use the computer as a writing tool. Emphasis is on saving, retrieving, printing, and edit-

ing text, with the ultimate goal of producing usable documents for advanced writing classes. (Prerequisites: Ability to type a minimum of 20 wpm or instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1713 Intro to Microsoft Word 1 credit (F/S)

This course covers the basic word processing functions students must know in order to use the computer as a writing tool. Emphasis is on saving, retrieving, printing, and editing text, with the ultimate goal of producing usable documents for advanced writing classes. (Prerequisites: Ability to type a minimum of 20 wpm or instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1715 Word Processing 2 credits (F/S)

This course provides students with the opportunity to learn word processing for employment or home use and to utilize a microcomputer as a word processor. Students will learn to create, edit, format, save, print manage, and enhance documents. (Prerequisites: ADSC1710 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1716 Advanced Word Processing 2 credits (S)

This course is a continuation of Word Processing with a focus on increased proficiency. Students will learn to use Macros, Merge, Sort, Templates, Table of Contents, Styles, and Graphics. (Prerequisites: ADSC1715 or equivalent) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1718 Keyboarding Drills 1 credit (F/S)

This course is designed to increase keyboarding speed and improve accuracy through personal goal setting, error analysis, and intensive corrective practice work. (Prerequisites: ADSC1415 or equivalent; 35 wpm) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC1719 Presentation Software 2 credits (S)

This course covers the creation of a presentation using multimedia software package. It will allow you to create a professional presentation using a projection device attached to a personal computer. (Prerequisites: Knowledge of Windows) (1 hr lec/2 hrs lab/0 hrs OJT)

ADSC1770 Special Topics 1 credits (F/S)

This course is designed for a student desiring to update technical course background in a particular area, whether because of transferring to LSC, returning to complete program requirements, or desiring to update in a particular word processing software package without repeating general course content. (Prerequisites: Basic keyboarding and computer skills) (0- hr lec/2 hrs lab/0 hrs OJT)

ADSC2410 Desktop Publishing 2 credits (S)

This course is designed to introduce students to the concepts, terminology, techniques, and applications of desktop publishing. Students will integrate word processing and graphics and manipulate text and images as they produce professional business documents. (Prerequisites: ADSC1430 or equivalent) (1 hr lec/2 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

ADSC2497 Administrative Secretary Internship
3 credits (F/S)

This course is designed to provide the student with purposeful occupational experience in the Administrative Secretary Careers field. Each internship is an individualized experience. A training plan is created for each student in conjunction with the training site to provide experience related to the skills and knowledge acquired in the program. One credit is equal to 48 hours of internship. (Prerequisites: Advisor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

ADSC2520 Advanced Legal Practices 3 credits (F/S)

This course covers advanced legal procedures, use of terminology, and document production relating to various specialty areas of law in Minnesota, with an emphasis on advanced transcription and word processing skills. (Prerequisites: ADSC1525, ADSC1512, and ADSC1515) (2 hrs lec/2 hrs lab/0 hrs OJT)

ADSC2597 Law Office Internship 3 credits (F/S)

This course is designed to provide the student with purposeful occupational experience in the law office. Each internship is an individualized experience. A training plan is created for each student in conjunction with the training site to provide experience related to the skills and knowledge acquired in the program. One credit is equal to 48 hours of internship. (Prerequisites:  ; Advisor approval) (0 hrs lec/0 hrs lab/9 hrs OJT)

ADSC2695 Medical Secretary Capstone 1 credits (S)

This course is designed to provide the student with challenging real-life situations and document-production activities as well as an interaction with a computer-driven software package. It will allow the medical secretary to apply the skills and knowledge acquired in the program by completing various standard documents that are used in a typical medical office setting. (Prerequisites: Completion of or concurrent enrollment in ADSC1612 and ADSC1625 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

ADSC2697 Medical Secretary Internship
3 credits (F/S)

This course is designed to provide the student with purposeful occupational experience in the Medical Secretary field. Each internship is an individualized experience set up by the program leader in conjunction with the training site to provide experience related to the skills and knowledge acquired in the program. One credit is equal to 48 hours of internship. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

ADSC2999 Special Topics in Administrative Support
1-3 credits (I)

Study of special topics in administrative support. Special course topics will be announced in the class schedule.

Allied Health**ALTH1400 Introduction to Allied Health**
2 credits (F/S)

This course will provide students with a foundation of knowledge and skills required for a variety of allied health occupations. Course content will include, but not be limited to, concepts such as: information on roles and responsibilities of members of the health care team, basic com-

munication skills, legal and ethical guidelines, safety and infection precautions, and changes associated with patient life stages. In addition, students will learn about fundamental health care skills to include: vital signs, handwashing, body mechanics, patient transfer techniques, and computer information skills. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

ALTH1410 Medical Terminology 1 credit (F/S)

Utilizing an independent study method of workbook/text reading and assignments, weekly tests, and computer assisted learning, this course provides the student with a working knowledge of common medical terms and abbreviations. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ALTH1420 Communication for Health Professionals
2 credits (F/S)

This course examines cultural and ethnic diversity in the United States and the profound impact this has on the delivery of health care services. Interpersonal skills such as assertive communication, conflict management, problem solving, and facilitation skills will also be covered in relation to health care provider roles. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

ALTH1430 ARC: First Aid & CPR/AED for Professional Rescuer 1 credit (F/S)

This course is for students pursuing health occupations. It covers the basic steps of caring for injuries and/or sudden illness, as well as information on injury and accident prevention. Content also includes systems of the human body, prevention of disease transmission, etc. The student will be required to demonstrate rescue breathing and CPR on the adult, child and infant manikins, two-rescuer CPR, and use of the automated external defibrillator (AED), resuscitation masks and bag valve masks. After successful completion of the skills and written tests, the student will receive a certificate for Standard First Aid (valid for three years) and a certificate for CPR/AED for the Professional Rescuer (valid for one year). Card fee. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ALTH1435 American Red Cross First Aid & Community CPR 1 credit (S)

This course is intended for students who are not pursuing a health occupation. It covers the basic steps of caring for injuries and/or sudden illness and includes information on injury prevention. The student will be required to demonstrate CPR and rescue breathing for the infant, child, and adult. After successful completion of the skills and written tests the student will receive a Certificate for Community CPR (valid for one year) and a Certificate for First Aid (valid for one year). (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ALTH1440 Medical Ethics and Law 1 credit (F/S)

This course will introduce health occupation students to basic ethical principles, codes of ethics, bioethics, and laws that govern the behaviors of health care workers today. (Prerequisites: Enrolled in health program or instructor's consent) (1 hrs lec/0 hrs lab/0 hrs OJT)

ALTH2000 Lifestyles for Aging Well 3 credits (F)

Through lecture, lab, and hands-on application, students will develop and implement a wellness education program for elders that will improve their health and well being. The wellness program will involve elders who want to be

active, learn more about aging and how to cope with the realities of aging. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ALTH2002 Therapeutic Interventions with Elders
2 credits (S)

The student will learn approaches to communicate effectively with elders in a variety of situations. Various modalities will be introduced to facilitate therapeutic interactions/activities with elders. Content will also include support and partnerships with family members who are caregivers. (Prerequisites: None) (2 hrs lec/0 hrs/0 hrs OJT)

ALTH2004 Dementia and Care Giving 2 credits(F/S)

This course will teach caregivers ways to care for patients/people with dementia by utilizing their abilities and engaging them in meaningful activities that will improve their quality of life. Understanding cognitive levels and applying the technique of activity-focused care will provide practical and success oriented approaches to care. (Prerequisites: None) (2 hrs lec/0 hr lab/0 hr OJT)

ALTH2006 Aging: Physiology and Function
2 credits (F)

This course provides an overview of the physiological changes that occur with normal aging and how these changes impact one's ability to function in daily routines. Myths and stereotypes of aging will be discussed as well as biological theories of aging. Cerebrovascular accidents, orthopedic conditions, cardiovascular conditions, etc. will be explained in term of their impact on function with elders. Students will learn about adaptations for task performance so elders can remain active. (Prerequisites: None) (2 hrs lec/0 hr lab/0 hr OJT)

ALTH2008 Special Topics in Gerontology
1-3 credits (F/S)

This course allows the student an opportunity to be self-directed in selecting, planning, implementing and evaluating a variety of projects or activities to promote understanding and competence in the area of gerontology. This course can be taken for 1, 2, or 3 credits to accommodate selected individual learning experiences. (Prerequisites: None) (0 hrs lec/2-6 hrs lab/0 hrs OJT)

ALTH2999 Special Topics in Allied Health
1-3 credits (I)

Study of special topics in allied health. Special course topics will be announced in the class schedule.

Anthropology

ANTH1110 Cultural Anthropology 3 credits(F/S)

An introduction to the concepts, methods, and theories of cultural anthropology, focusing on the range of variation and degree of uniformity in human behavior. This course will examine elements of socio-cultural systems: religion/magic, politics, social organization/kinship, economics, technology and environment. For anthropology, sociology, nursing, criminal justice, and social work majors as well as for students interested in broadening their world view. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (8) Global Perspective. (Prerequisites:  , ENGL1106 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH1120 Cultures of North American Indians
3 credits (S)

An examination of a variety of native North American cultures concentrating primarily on those north of Mexico. Course focus will highlight cultural systems and cultural adaptation to various geographic/environmental areas. MTC goal areas: (2) Critical Thinking, (5) History and Social and Behavioral Sciences, and (8) Global Perspective. (Prerequisites:  , ENGL1106 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH1125 Physical Anthropology and Archaeology
3 credits (F)

An introduction to physical anthropology and archaeology by studying the origin and development of humans and non-human hominoids. This includes an analysis of anatomy and hominid behavior by examining fossil evidence with method and theory of archaeology. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (8) Global Perspective. (Prerequisites:  , ENGL1106 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH1200 Anthropological Field Experience Abroad
3 credits (S)

This course is a reading, writing and travel experience which focuses on employing ethnographic methods in a field setting. May be repeated up to 9 credits. MTC goal areas: (2) Critical Thinking, (8) Global Perspective, and (10) People and the Environment. (Prerequisites: A prior course in Anthropology and ENGL1106 are highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH1301 Cultures of Mesoamerica 3 credits(F/S)

This course investigates current and past cultures of Mesoamerica, such as Aztec and Mayan. This course will employ both archaeological and ethnographic data in lectures, readings, films and discussion formats. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (10) People and the Environment. (Prerequisites: A prior course in Anthropology and ENGL1106 are highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH2115 World Ethnography 3 credits(F/S)

A course investigating various cultures by using ethnographies. Cultures representing diverse and varied subsistence patterns, political systems, and family organizations will be studied. Such cultures may include, but are not limited to: The Kung, the Yanamamo, the Inuit, and the Masai. (This course is sophomore level.) MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (10) People and the Environment. (Prerequisites:  ) ANTH1110, ENGL1106) (3 hrs lec/0 hrs lab/0 hrs OJT)

ANTH2999 Special Topics in Anthropology
1-3 credits (I)

Study of special topics in anthropology. Special course topics will be announced in the class schedule.

College Level Reading = 
College Level Writing = 

Architectural Technology

ARCH1400 Intro to Architecture 3 credits (F)

This course covers the basic principles and applications of architecture. Concepts of planning and space utilization are explored in conjunction with regulatory requirements. An exposure to architectural history is given, along with an overview of architecture's current role in the construction industry. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ARCH1411 Materials and Methods I 2 credits (F)

This course covers the technical aspects and proper application of building materials as used in the systems of light frame construction. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

ARCH1415 Project Lab I 6 credits (F)

This course covers an introduction to print reading, the use of drafting tools, and the production of drawings for light frame construction. Three-dimensional visualization skills are developed through technical drawing exercises. It is intended that ARCH1425 be taken concurrently. Students will apply both manual and CAD drafting methods for the project drawings of this course. (Prerequisites: None) (2 hrs lec/8 hrs lab/0 hrs OJT)

ARCH1420 Intro to Structures 2 credits (F)

This course covers basic structural theory, the calculation of loads on a system of structural members, and the use of published load tables to select structural members. (Prerequisites: MATH0450, or assessment score placed at or above MATH0460 or MATH1531) (2 hrs lec/0 hrs lab/0 hrs OJT)

ARCH1425 Architectural CAD I 3 Credits (F)

In this course students are introduced to industry standard CAD software using the MS Windows environment and file management. A combination of lecture and hands-on lab is used to develop a solid foundation for two-dimensional architectural CAD drafting. (Prerequisites: None) (1 hrs lec/4 hrs lab/0 hrs OJT)

ARCH1430 Architectural Design-Criteria/Constraints 3 credits (S)

This course outlines criteria for preliminary design and establishes practical guidelines for the development and implementation of a building's architectural program. Specific attention is given to identifying and applying the various regulatory requirements of current code publications. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ARCH1435 Site Design 2 credits (S)

This course covers the concepts of contouring, site planning, and the development of plot plans. Consideration is given to the topographic, climatic, and geological aspects of site development. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

ARCH1441 Materials and Methods II 3 credits (S)

This course covers the technical aspects and proper application of building materials as primarily used in the systems of commercial construction. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

ARCH1445 Project Lab II 4 credits (S)

This course covers commercial print reading and the production of working drawings for commercial construction. It is intended that ARCH1455 be taken concurrently. Focus is placed on application of CAD drafting. (Prerequisites: ARCH1415) (1 hrs lec/6 hrs lab/0 hrs OJT)

ARCH1455 Architectural CAD II 3 credits (S)

This course develops efficiency in two-dimensional techniques and applies office standards for CAD such as the use of line weights and layer guidelines. Students are introduced to three-dimensional modeling and rendered presentation drawings. The lab focuses on applying architectural criteria to CAD drawing production. (Prerequisites: ARCH1425 or CADE1407) (1 hr lec/4 hrs lab/0 hrs OJT)

ARCH2400 Mechanical & Electrical Systems

3 credits (F)

This course covers the principles of heat loss, heating, ventilation, plumbing, and electrical systems. Lab exercises include the reading, layout, and development of mechanical and electrical plans. (Prerequisites: ARCH1445) (2 hrs lec/2 hrs lab/0 hrs OJT)

ARCH2405 Architectural CAD III 2 credits (F)

This course covers the utilization of advanced CAD tools and techniques. Advanced 3-D modeling and rendering techniques help students communicate a design. CAD customization and management concepts are applied to lab assignments. (Prerequisites: ARCH1455) (1 hr lec/2 hrs lab/0 hrs OJT)

ARCH2435 Project Lab III 6 credits (F)

This course identifies the myriad of concerns facing the architectural detailer and describes how solutions can be approached by applying criteria which is essential for the successful performance of a building. Projects include team design activities with a focus placed on the detail development of various building systems covered in previous coursework. (Prerequisites: ARCH1441, ARCH1445) (2 hrs lec/8 hrs lab/0 hrs OJT)

ARCH2450 Specifications and Construction

Administration 3 credits (F)

This course covers the legal aspects of a project's construction phase and develops the relationship between specifications and drawings. Project manual format, principles of use and administration procedures are outlined including the preparation of standard documentation. (Prerequisites: ARCH1440) (3 hrs lec/0 hrs lab/0 hrs OJT)

ARCH2460 Commercial Project 6 credits (S)

This course synthesizes an architectural program with environmental and regulatory requirements in the development of a coherent building concept. Design/construction drawings are developed for a commercial building based on an interdisciplinary approach to building systems. (Prerequisites: ARCH2435) (1 hr lec/10 hrs lab/0 hrs OJT)

ARCH2470 Structural Applications 3 credits (S)

This course covers the development of structural framing plans and the associated details for various construction materials. (Prerequisites: ARCH1445) (1 hr lec/4 hrs lab/0 hrs OJT)

ARCH2999 Special Topics in Architectural Technology
1-3 credits (I)
Study of special topics in architectural technology. Special course topics will be announced in the class schedule.

Art

ART1110 Foundations of 2-Dimensional Art
3 credits (F/S)
A hands-on introduction to the language of art emphasizing the elements and principles of two-dimensional forms, perception, and the design process. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1115 Painting I 3 credits (F)
Introduction to traditional and contemporary painting concepts, techniques, and strategies for seeking new forms of expression, better ways to interpret subjects, and new avenues of self discovery. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ART 1110 or ART 1151 recommended) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1116 Painting II 3 credits (S)
Advanced painting concepts and strategies exploring alternative avenues to expression, technique, and methods of painting. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ART1115 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1118 Art Appreciation 3 credits (F/S)
An introduction to human creativity and expression in the visual arts from a global perspective. Students will view and discuss works from a wide spectrum of human history and world cultures with an emphasis on expression, style, and artistic meaning. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ART1120 Art History: Prehistoric to 1400 A.D.
3 credits (F)
An introduction to the history of art emphasizing the social context and historical fabric out of which art has developed. The time period covered by this class is from prehistoric to approximately 1400 A.D. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective) (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ART1122 Art History: Renaissance to the Present
3 credits (S)
This course covers the history of art from the beginning of the Renaissance period through to the present. This course will focus on the various roles art and artists play in different cultures and time periods. Students do not need Introduction to Art History to take this course. MTC goal areas (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ART1125 Watercolor 3 credits (F/S)
A studio course presenting practical and creative knowledge for students at any level who want to develop, explore, and experiment with the exciting possibilities of

the watercolor medium. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: Recommended ART 1110 or ART 1151) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1130 Introduction to the Studio Arts
3 credits (F/S/I)
Introductory studio course for those with little or no creative experience in art. Students will work with a variety of different materials, techniques, and concepts. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts. (Prerequisites: None) (1 hrs lec/4 hrs lab/0 hrs OJT)

ART1138 Ceramics I 3 credits (F/S)
Working with ceramic techniques emphasizing slab, pinch, coil, and wheel methods of clay construction. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1139 Ceramics II 3 credits (I)
Intermediate-level ceramic hand-building, wheel throwing, decorating, glazing, and firing methods. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ART1138 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1140 Ceramics III 3 credits (F/S)
Advanced level ceramic methods in hand-building, wheel throwing, glazing, and kiln firing. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ART1139 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1151 Drawing I 3 credits (F/S)
An introduction to traditional and contemporary drawing methods, concepts and techniques through structured experiences in drawing and perceiving. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1152 Drawing II 3 credits (S)
An advanced study of drawing concepts and techniques with emphasis on discovering new avenues to self expression. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ART1151 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1160 Print-making 3 credits (S)
An introduction to traditional contemporary printing methods focusing on concepts, materials, and techniques. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1165 Metal Art/Jewelry I 3 credits (I)
An introduction to basic hand-fabrication techniques and processes using non-ferrous metals as small sculptural forms or jewelry. Avenues of study include layout, shaping and fitting mating parts, finishing and hand-soldering of projects. Students are required to purchase hand tools and pay a personal property fee. MTC goal areas: (6) Humanities and Fine Arts (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1167 Metal Art/Jewelry II 3 credits (I)
A concentrated study in small metals, refinement of techniques and concepts, geared to meet the needs of individual students and to help them develop personal direction. This course will also introduce and familiarize students with the lost wax casting process. MTC goal areas: (6) Humanities and Fine Arts (Prerequisite: ART 1165) (1 hr lec/4 hrs lab/0 hrs OJT)

ART1199 Special Topics in Art 1-3 credits variable (I)
Study of various topics in Art History and Studio Art. May focus on a stylistic period, cultural group, or technical process. Topics will be announced prior to course offering. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (Variable 0-3 hrs lec/0-6 hrs lab/0 hrs OJT)

ART1210 3-Dimensional Design 3 credits (F/S)
An exploration of the principles, skills, and processes of 3-dimensional design that form the language of art. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART 1215 2-D Digital Design 3 credits (F/S)
This course will introduce and expand your knowledge of design using computers – the process of digital imaging. While developing artistic skills that involve concept development, you will learn about computer technology and how to use digital imaging programs. MTC goal areas: (2) Critical Thinking and (6) The Humanities—the Arts, Literature, and Philosophy. (Prerequisites: Successful completion of a college art course or instructor's permission.) (1 hr lec./4 hrs lab/0 hrs OJT)

ART1217 Collage 3 credits (F/S)
This course will introduce artists that use "found objects" to make art, discuss the impact of the artistic materials used in making artwork, and create two dimensional and three dimensional artwork out of found objects; discarded and/or natural. Students will address experimental use of various media to develop a visual sensitivity to artwork. (MTC Goal Areas: (2) Critical Thinking, (6) The Humanities and Fine Arts. (0 hrs lec/6 hrs lab/0 hrs OJT).

ART1300 Sculpture Workshop 1 credit
This course will explore basic sculpture construction, modeling, slab, found objects including discarded and nature, and instillation. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking, and (6) Humanities and Fine Arts. (0 hrs lec/2 hrs lab/0 hrs OJT)

ART1305 Ceramics Workshop 1 credit
This course will explore traditional methods used to construct ceramic form. The potter's wheel will be the primary focus. The slab, coil and pinch techniques will be demonstrated based on request. Decorative techniques using studio slips, earthenware glazes and the Raku process will be introduced. A personal property fee will be charged in addition to tuition. MTC Goal Areas: (2) Critical Thinking and (6) Humanities and Fine Arts (0 hrs lec/2 hrs lab/0 hrs OJT)

ART1400 Art History: Women Artists 3 credits (F/S)
This course is an introductory survey of women artists and their art. Students will view and discuss works from a wide spectrum of human history and world cultures. Both art and craft traditions will be examined. MTC goal areas (2) Critical Thinking, (6) Humanities and Fine Arts, (8) Global perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT).

ART1415 Art Careers, Creating your Portfolio 3 credits
This course will concentrate on creating a portfolio/resume for a career in art. Students will make artwork while concentrating on developing the artists' statement and artistic goals of the student. During the class the students will have an exhibition of their artwork. During the exhibition students will digitally document artwork. A personal property fee will be charged in addition to tuition. (Prerequisites:  . Successful completion of a college art course or permission.) (1 hrs lec/4 hrs lab/0 hrs OJT).

ART1500 Digital Photography 3 credits
This introductory course will cover the fundamentals of digital photography, composition, and presentation. In addition, students will examine the aesthetic, theoretical, and historical aspects of photography as an expressive medium. Students will need to supply their own digital camera and photo editing software. Information on selecting a digital camera will be covered during the first part of the course. MTC goal areas (2) Critical Thinking, and (6) Humanities and Fine Arts. (Prerequisites: Working knowledge of Windows (or Macintosh platform). (2 hrs lec/2 hrs lab/0 hrs OJT).

ART2100 Sculpture I 3 credits (F/S)
This course provides an opportunity to explore a variety of approaches and techniques of 3-dimensional forming or sculpting in a studio environment. Lessons are designed to encourage and enlighten you as you search for avenues of self-expression and explanations of your most personal relationship with the world around you. Approaches and techniques will help you generate fresh ideas and focus your attention on changing attitudes which have challenged the values of modern sculpture. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART2102 Sculpture II 3 credits
Intermediate level construction techniques using found objects, clay, plaster, adhesives, fasteners and other common materials in conjunction with the development of a personal aesthetic and understanding of concepts used to create contemporary sculpture. A lab fee will be assessed. (Prerequisites: Art 2100) (1 hr lec/4 hrs lab/0 hrs OJT)

ART2105 Sculptural Casting in Clay 3 credits (F)
 This course includes working with sculpture modeling, mold making, and casting techniques using clay, plaster, and casting slip. A personal property fee will be charged in addition to tuition. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

ART2112 Watercolor II 3 credits
 Experience in advanced watercolor techniques and concepts. (Prerequisites: ART1125) (1 hr lec/4 hrs lab/0 hrs OJT)

ART2200 Art Portfolio Preparation 1 credit
 This course will concentrate on creating a portfolio/resume for a career in art. Students will develop the artists' statement and will gain understanding of the preparation of a professional portfolio. Students will plan/prepare/present an exhibition of their artwork under guidance of faculty. During the exhibition students will digitally document their art work. (Prerequisites:  . Successful completion of a college art course or permission.) (1 hr lec/0 hrs lab/0 hrs OJT)

ART2999 Special Topics in Art 1-3 credits (I)
 Study of special topics in art. Special course topics will be announced in the class schedule.

Automotive Service Technology

ASTE1400 Introduction to Transportation 3 credits (F)
 This course provides the student with a basic understanding of automobile design and the ability to properly and safely perform basic service and repair procedures in the automotive industry. Use of service manuals, flat rate manuals, bulletins, trouble shooting charts, compact disc information retrieval systems, and Internet resources will be introduced. Emphasis will be placed on developing diagnostic skills and interpreting specifications. Minor automotive service and introduction to automotive systems will be covered in lab. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ASTE1410 Air Conditioning 2 credits (F)
 This course covers the principles of air conditioning. The various types, diagnosis of malfunctions, testing, and repair are included. Emphasis will be placed on environmentally friendly repair procedures. Practical experience is gained on live systems; diagnosis, recovery, charging, and performance testing of systems. (Prerequisites: ASTE 1400, concurrent enrollment, or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ASTE1430 Auto Electrical Fundamentals 3 credits (F)
 This course covers the fundamentals of electricity and electronics, sources of electricity, circuits, magnetism, resistance, coils, capacitance, diodes, and solid state devices as they are related to the automobile. Use of meters will be emphasized. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ASTE1440 Body Electrical and Electronics 3 credits (S)
 This course covers the operation, servicing techniques of chassis wiring, lights, instruments, headlight aiming, and

how to read and interpret wiring diagrams. (Prerequisites: ASTE1430) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE1450 Engine Service 5 credits (S)
 This course covers the fundamentals of engine operation, repair, and maintenance. The procedures for rebuilding, precision measurement, parts and failure identification will be presented. Cylinder block and head disassembly and repair will be performed. (Prerequisites: ASTE1400 or instructor's consent) (2 hrs lec/6 hrs lab/0 hrs OJT)

ASTE1460 Basic Fuel System Service 2 credits (S)
 This course covers the theory and principles of automotive fuel systems including carburetors, fuel pumps, fuel tanks, filters, and emission control systems associated with fuel systems on the automobile. Diagnosis, adjustments, and repair of components will be emphasized. (Prerequisites: ASTE1400 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ASTE1470 Basic Engine Driveability 3 credits (S)
 This course covers the theory and principles of automobile ignition systems, subsystems, and related emission components. Engine mechanical troubleshooting and diagnosis will be emphasized. Engine analyzers and diagnostic equipment will be introduced. (Prerequisites: ASTE1400, ASTE1430, or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE1480 Basic Hydraulics (1 credit) (F)
 This course covers basic hydraulic principles and application. There are both classroom and lab settings. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

ASTE1500 Charging & Starting Systems 3 credits (S)
 This course covers the theory of starting motors and charging systems. Testing procedures, parts identification, and circuit testing will be included. Emphasis will be placed on diagnosis and troubleshooting procedures. (Prerequisites: ASTE1400, ASTE1430, or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

ASTE2400 Suspension and Steering Repair 3 credits (S)
 This course covers the theory, history, and repairs of various steering and suspension systems using coil springs, leaf springs, torsion bars, McPherson struts, and modified struts. It also covers operation and repairs to various steering systems. (Prerequisites: ASTE1400, MATH1440) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE2410 Basic Wheel Alignment 2 credits (F)
 This course covers suspension systems using leaf springs, coil springs, McPherson struts, and torsion bars along with the various procedures required to check and adjust wheel alignment angles such as caster, camber, and toe. (Prerequisites: ASTE1400) (1 hr lec/2 hrs lab/0 hrs OJT)

ASTE2420 Advanced Wheel Alignment 2 credits (S)
 This course covers the method of four-wheel alignment checks and correction procedures and any changes in front or rear suspension systems. (Prerequisites: ASTE1400, ASTE2400, and ASTE2410) (0 hr lec/4 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

ASTE2430 Clutch & Differential 3 credits (S)
 This course covers automotive and light truck clutches. Content includes design, adjustment, diagnosis, and repair. Mechanical and hydraulic systems are presented. Drive line phasing, alignment, balance, and universal joint replacement are included. Repair procedures and theory of differential operation are also covered. (Prerequisites: ASTE1400 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE2440 Brakes 4 credits (S)
 This course covers the principles of brakes, hydraulic system fundamentals, disc and drum brakes, parking brakes, and power assist units. Emphasis will be placed on diagnosis and repair of various types of braking systems. Anti-lock braking systems with electronic control systems are also covered. (Prerequisites: ASTE1400 and ASTE1480 or instructor's consent) (2 hrs lec/4 hrs lab/0 hrs OJT)

ASTE2450 Transmission Theory 3 credits (F)
 This course covers basic theory of torque converters, planetary gears, clutches, bands and hydraulics. The class stresses how automatic and manual transmissions work, their basic parts, function, and power train. (Prerequisites: ASTE1400, ASTE1430, and ASTE1480) (3 hrs lec/0 hrs lab/0 hrs OJT)

ASTE2460 Transmission Lab 3 credits (F)
 This course covers hands-on lab experience in which various transmissions and transaxles are overhauled, adjusted and bench tested. Basic overhaul techniques, special tool, and gauge usage are taught. (Prerequisites: ASTE1400, ASTE1430 and ASTE2450) (0 hr lec/6 hrs lab/0 hrs OJT)

ASTE2470 Introduction to Automotive Computers 3 credits (F)
 This course covers theory and operating principles of automotive computers, sensors, and control devices. (Prerequisites: ASTE1400, ASTE1430, and ASTE1470) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE2480 Advanced Air Conditioning 3 credits (S)
 This course expands on the principles of air conditioning covered in ASTE1410. Emphasis will be on becoming more proficient in diagnosis, recovery, charging, and performance testing. Emphasis will be placed on major and minor component replacement procedures. All repairs will be accomplished using environmentally safe procedures. (Prerequisites: ASTE1400 and ASTE1410)

ASTE2500 Fuel Systems II 3 credits (F)
 This course will cover computer controlled carburetors and throttle body or multiple injection systems. (Prerequisites: ASTE1400, ASTE1430, ASTE1460, and ASTE2470) (1 hr lec/4 hrs lab/0 hrs OJT)

ASTE2510 Advanced Engine Driveability 4 credits (F)
 This course covers skills in diagnosing, testing, and correcting problems related to engine performance. The course concentrates on computer controlled systems. (Prerequisites: ASTE1400, ASTE1430, ASTE1460, ASTE1470, and ASTE 2500) (2 hrs lec/4 hrs lab/0 hrs OJT)

ASTE2999 Special Topics in Automotive Service Technology 1-3 credits (I)
 Study of special topics in automotive service technology. Special course topics will be announced in the class schedule.

Air Force ROTC

The Air Force Reserve Officer Training Corps (AFROTC) at the University of Minnesota, Duluth (UMD) is a college-level educational program that gives students the opportunity to become Air Force officers while completing their degrees. Any Lake Superior College student may enroll in aerospace studies courses. AFROTC offers post-collegiate opportunities in more than 100 career specialties. Air Force officers are challenged with organizational responsibilities and experiences not often available to new college graduates. This program is for students who want to challenge themselves as Air Force leaders and managers while serving their country in a professional, high-tech environment. Active-duty Air Force officers provide a curriculum that gives students insight into the mission, organization and operation of the U.S. Air Force. Students study Air Force history, leadership, management, and professionalism, as well as U.S. foreign policy and its relationship to defense policy.

Scholarships covering tuition, fees, books, and a monthly stipend are available on a competitive basis. Please contact the AFROTC program at UMD for additional information on the program and scholarship opportunities at 218-726-8159.

AVIA1000 The Foundations of the U.S. Air Force I 1 Credit (F)
 First half of a two-part survey course of U.S. Air Force as a public-service organization covering the role of the military in U.S. society; military history; officership; professionalism; core values; career opportunities; customs/courtesies; communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing followership experiences. (Must register though UMD AFROTC program for the Leadership Laboratory.)

AVIA1005 The Foundations of the U.S. Air Force II 1 Credit (S)
 Second half of a two-part survey course of U.S. Air Force as a public-service organization covering the role of the military in U.S. society; military history; officership; professionalism; core values; career opportunities; customs/courtesies; communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing followership experiences. (Must register though UMD AFROTC program for the Leadership Laboratory.)

AVIA2000 The Air Force Way I 1 credit (F)
 A two-part survey course covering Air Force heritage; development/deployment of air power, a primary element of US national security; leadership and quality principles; ethics and values. Emphasis on leadership development based on student participation in group problem solving. Oral/written communication development emphasized. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

AVIA2005 The Air Force Way II 1 credit (S)
 The second half of a two-part survey course covering Air Force heritage; development/deployment of air power, a primary element of US national security; leadership and quality principles; ethics and values. Emphasis on leadership development based on student participation in group problem solving. Oral/written communication development emphasized. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

Aviation

AVIA1211 Private Pilot: Ground 4 credits (F)
 This course serves as a preparation for the FAA Private Pilot knowledge test which will be taken upon successful completion of the course. Course content includes but is not limited to: FAA regulations, weather, radio communications and navigation, safety, aerodynamics, airspace and emergency procedures. Successfully testing for the Private Pilot knowledge test is required to fulfill course requirements. (Prerequisites:  or equivalent) (F hrs lec/0 hrs lab/0 hrs OJT)

AVIA1212 Private Pilot: Flight Lab 2 credits(F, S)
 This course includes dual instruction and solo flight training required in order to acquire the FAA Private Pilot Certificate. Instruction includes all requirements as listed in CFR Part 61. Successfully testing for the FAA Private Pilot Certificate with a minimum of 60 flight hours is required in order to fill course requirements. (Prerequisites: AVIA1211 or equivalent, FAA medical/student pilot certificate and airport security clearance) (0 hrs lec/4 hrs lab/0 hrs OJT)

AVIA1215 Introduction to Professional Aviation 2 credits (F)
 This course provides a broad presentation of the historical development of aviation in the U.S. and its influence on our current society. Examination of past, present, and future aviation careers will also be presented. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

AVIA1221 Commercial Pilot Ground 2 credits (S)
 This course serves as a preparation for the FAA Commercial Pilot Knowledge test which will be taken upon successful completion of classroom work. Course content includes but is not limited to: FAA regulations, advanced: weather theory, navigation, safety, aerodynamics, airspace and emergency procedures. Successfully testing for the Commercial Pilot Knowledge test is required to fulfill course requirements. (Prerequisites: AVIA1211, college level reading or equivalent) (2 hrs lec/0 hrs lab/0 hrs OJT)

AVIA1222 Commercial Pilot: Flight Lab I 1 credit (F, S)
 This flight lab consists of cross-country flight concentrating on improving the following piloting skills: dead reckoning, pilotage, radio navigation and communication procedures, airport operations and weather evaluation. Completion requirements include prescribed routes and a total of 125 hours of flight time. Special security clearance requirements are in effect, contact instructor for details. (Prerequisites: AVIA1211, 1212) (0 hrs lec/2 hrs lab/0 hrs OJT)

AVIA1225 Aircraft Systems and Power Plant 2 credits (S)
 This course serves as an introduction to electrical, hydraulic and mechanical systems as well as aircraft structures and design. Engine identification and operation including lubrication, carburetion, ignition, supercharging and propellers will be presented. (Prerequisites: AVIA1211, or  or equivalent) (2 hrs lec/0 hrs lab/0 hrs OJT)

AVIA2215 Aviation Safety 2 credits (S)
 This course provides students with an overview of factors related to the safe operation of aircraft. Pilot performance, aircraft design, environmental factors and the operating environment will be examined as they relate to accident cause and prevention. (Prerequisites: FAA pilot certificate,  or equivalent) (2 hrs lec/0 hrs lab/0 hrs OJT)

AVIA2223 Commercial Pilot: Flight Lab II 4 credits (F, S)
 This course includes dual instruction required in order to acquire the FAA Instrument Rating. Instruction includes all requirements as listed in CFR Part 61. Successfully testing for the FAA Single Engine Land Instrument Rating is required in order to fulfill course requirements. Special security clearances are in effect, contact instructor for details. (Prerequisites: AVIA1212 or equivalent) (0 hrs lec/8 hrs lab/0 hrs OJT)

AVIA2224 Commercial Pilot: Flight Lab III 3 credits(F, S)
 This course includes dual instruction required in order to acquire the FAA Commercial Pilot Single Engine Land Certificate. Instruction includes all requirements as listed in CFR Part 61. Successfully testing for the FAA Commercial Pilot Certificate is required in order to fulfill course requirements. Special security clearances are in effect, contact instructor for details. Minimum flight time 250 hours. (Prerequisites: AVIA2223 or equivalent) (0 hrs lec/6 hrs lab/0 hrs OJT)

AVIA2225 Management of Aviation Service Operations 2 credits (S)
 This course will present to the student the elements of airport operations and their importance to the success of the business. Course material will include the study of the duties and responsibilities of an airport manager and other employees. Students will also complete training that will qualify them for Phillips 66 Flight Line Training Certification. (Prerequisites:  or equivalent) (2 hrs lec/0 hrs lab/0 hrs OJT)

<p>Term Course Codes: (F) = Fall Semester (S) = Spring Semester (F/S) = Fall & Spring Semesters (I) = Intermittent (Arr) = Arranged</p>

AVIA2231 Instrument Pilot: Ground 3 credits (F)

This course serves as a preparation for the FAA Instrument Pilot Knowledge test which will be taken upon successful completion of classroom work. Course content includes but is not limited to: Instrument flight operations, electronic navigation/communication and emergency procedures. Multi-engine aerodynamics and flight characteristics will also be presented. Successfully testing for the Instrument Pilot Knowledge test is required to fulfill course requirements. (Prerequisites:  or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

AVIA2232 Flight Instructor: Ground 3 credits (S)

This course serves as a preparation for the FAA Fundamentals of Instruction Knowledge test and the Flight Instructor Airplane Knowledge test. Both of these tests will be completed upon successful completion of classroom work. Course content includes but is not limited to: The learning process, teaching techniques, evaluation and critiquing, flight instructor responsibilities and flight operations relevant to private, commercial and flight instructor certification. Successfully testing for the Fundamentals of Instruction and Flight Instructor Airplane Knowledge tests are required to fulfill course requirements. (Prerequisites: AVIA1221,  or equivalent)) (3 hrs lec/0hrs lab/0 hrs OJT)

AVIA2233 Certified Flight Instructor: Flight Lab 1 credit (Arr)

This course provides the student with the necessary flight training to prepare them for the FAA Certified Flight Instructor flight test. Flight instruction covers all maneuvers necessary for teaching private and commercial students. (Prerequisite: AVIA2224, AVIA2232) (0 hrs lec/2 hrs lab/0 hrs OJT)

AVIA2235 Survival and Rescue 1 credit (S)

This course will present to the student accepted techniques used for survival and rescue from remote locations in cold, wet and desert situations. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

AVIA2242 Wilderness and Seaplane: Ground 1 credit (S)

This course presents some of the unique situations encountered when operating an aircraft in remote locations on wheels, skis and floats. Float operations pertaining to maneuvers necessary to acquire a commercial pilot seaplane rating will be addressed. (Prerequisites: AVIA2223, (1 hr lec/0 hrs lab/0 hrs OJT)

AVIA2243 Seaplane Flight Lab 1 credit (Arr)

This course provides dual float plane instruction necessary to acquire a commercial single engine seaplane rating. A minimum of 10 hours of instruction is required. (Prerequisites: AVIA2242 or equivalent, Commercial pilot certificate or 350 flight time) (0 hrs lec/2 hrs lab/0 hrs OJT)

AVIA2999 Special Topics in Aviation 1-3 credits (I)

This course is a study of special topics in aviation. Course topics will be announced in the class schedule.

Broadcasting**BDCT1411 Intro to Radio 3 credits (F)**

This course offers students training in basic equipment operation with an emphasis on announcing news, music programs and commercials. Voice manipulation, copy preparation and equipment usage are emphasized. Students will also be introduced to audio production techniques. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

BDCT1412 Radio Production 3 credits (S)

This course covers advanced radio production techniques and announcing skills. Emphasis is on digital equipment operation and FCC regulations. (Prerequisites: BDCT1411) (1 hr lec/4 hrs lab/0 hrs OJT)

BDCT1430 Intro to Television Graphics 2 credits (F/S)

This course will give the student hands-on experience using three on-screen graphics formats commonly used in the industry today. Students will work in Adobe Photoshop and on a DEKO 500 graphics generator. Avid graphics and titling will also be introduced. (Prerequisites: BDCT 1511 and modest computer proficiency, or consent of instructor. Placement test scores at READ 0460 and ENGL 0460 level.) (1 hr lec/2 hrs lab/0 OJT)

BDCT1511 Television Production I 4 credits (F)

This course will introduce the student to television production, basic terms and equipment use. Videotape shooting in the field and editing are included. (Prerequisites: None) (2 hrs lec/4 hrs lab/0 hrs OJT)

BDCT1512 Television Production II 4 credits (S)

This course will give the student an in-depth look at television production, including advanced editing techniques, in-studio production, graphics, switching, and directing. (Prerequisites: BDCT1511) (2 hrs lec/4 hrs lab/0 hrs OJT)

BDCT1610 The Business of Broadcasting & Advertising 3 credits (F)

This course provides a general overview of Broadcasting as a business and how it relates to the advertising industry. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

BDCT1620 Radio/TV Copywriting 4 credits (F)

This course covers the techniques for writing commercials, public service announcements, and promotional announcements for radio and television. (Prerequisites: None) (4 hrs lec/0 hrs lab/0 hrs OJT)

BDCT1640 Broadcast Journalism 3 credits (S)

This course introduces the student to the procedures and equipment used in broadcast news gathering, writing, and reporting. Students will learn how to identify a newsworthy story, how to conduct an interview and gather facts, and how to write and prepare broadcast new reports. Legal issues are also covered. (Prerequisites: BDCT 1411 and BDCT1511) (2 hrs lec/2 hrs lab/0 hrs OJT)

BDCT1670 Broadcast Management & Programming 2 credits (S)

This course covers the principles of broadcast station management and programming. Students will develop an understanding of the operation of radio and television stations, of audience rating methods and their impact on pro-

gramming design, and the duties of the manager and program director of radio and TV stations. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

BDCT1680 Radio/TV Sales 2 credits (S)
This course introduces the student to the principles and methods used in broadcast advertising sales. Students will prospect accounts, write proposals, and make sales calls. (Prerequisites: BDCT1610) (2 hrs lec/0 hrs lab/0 hrs OJT)

BDCT1797 Broadcast Internship 1-3 credits (F/S)
This course is an arranged and supervised internship at a broadcast station. A signed contract outlining goals and expectations, methods of supervision, and evaluation standards will be drawn for each student. BDCT1797 may be taken as one, two, or three credits. (Prerequisites: BDCT1411 and BDCT1511 or instructor's consent) (0 hrs lec/0 hrs lab/3-9 hrs OJT)

BDCT1799 Broadcast Practicum 1-3 credits (F/S)
This course deals with supervised independent study and/or projects in one or more phases of broadcasting. A signed contract outlining goals and expectation, methods of supervision, and evaluation standards will be drawn for each student. BDCT1799 may be taken as one, two, or three credits per semester. (Prerequisites: BDCT1411 and BDCT1511 or instructor's consent) (0 hrs lec/2-6 hrs lab/0 hrs OJT)

BDCT2999 Special Topics in Broadcasting 1-3 credits (I)
Study of special topics in broadcasting. Special course topics will be announced in the class schedule.

Biology

BIOL1000 Human Body in Health and Disease 5 credits (F/S)
This course is an introduction to body structure and function and their correlation to basic disease processes. Also included are basic cell structure and function, and an introduction to genetic principles. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (9) Ethic and Civic Responsibility. (Prerequisites: ) (4 hrs lec/2 hrs lab/0 hrs OJT)

BIOL1002 Essential Skills and Concepts for Biology and Health 2 credits (F/S)
A survey and review of concepts and processes essential for understanding biology and health sciences. Includes laboratory exercises designed to build essential laboratory and learning skills for success in these fields. Topics include homeostasis, chemistry of life, cell structure, transport mechanisms, metabolism, gene expression, cell division, laboratory safety, units and measurement, graphs and averages, scientific method, microscope use, and study and test taking skills for science courses. Satisfies the Intro to Cell Biology prerequisite for Biology courses. Must be passed with a grade of "C" or better to qualify as a prerequisite for other Biology courses (This course does not fulfill the lab sciences requirement for the AA degree.) MTC goal areas: (3) Natural Sciences. (Prerequisites:  or Reading score of 65 or above with concurrent enrollment in READ0460) (0 hrs lec/4 hrs lab/0 hrs OJT)

BIOL1005 Introduction to Cell Biology 1 credit (F/S)
An introduction to the field of cell biology with a focus on the basic unit of life, the cell - its function, chemistry, metabolism, and structure. Must be passed with a grade of "C" or better to qualify as a prerequisite for other Biology courses. (Prerequisites: ) (0 hrs lec/2 hrs lab/0 hrs OJT)

BIOL1007 Biology and Society 4 credits (F/S)
This is an elective course for non-science majors who want to gain an understanding of fundamental principles in biology and biochemistry, especially as they relate to contemporary biological issues facing society. (The issues discussed in the class will vary from semester to semester, but some examples might include: genetic engineering, DNA fingerprinting, the evolution of new diseases, etc.) Topics include: the scientific method, genetics and inheritance, evolution by natural selection, health and human body systems, and ecology and conservation. MTC goal areas: (2) Critical thinking, (3) Natural Sciences, (9) Ethics and Civic Responsibility. (Prerequisites: ) (3 hrs lec/2 hrs lab/0 hrs OJT).

BIOL1105 Biology of Women 3 credits (F/S)
An exploration of aspects of biology specific to women. The following topics will be emphasized: anatomy and physiology, reproductive biology, health issues which disproportionately affect women (eating disorders, osteoporosis, breast cancer, etc.), aging, genetic defects, hormones as they relate to women's life styles and reproduction, nutrition, and cultural views on women's reproductive biology. Not limited to women. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (7) Human Diversity. (Prerequisites: ) (2 hrs lec/2 hrs lab/0 hrs OJT)

BIOL1110 Minnesota's Natural Heritage 4 credits (F)
An introduction to the distribution, ecology, and management of Minnesota's biological resources. Ecological principles will be learned and applied to understand ecosystem function and implications for human use and management decisions. Field trips to regional natural and managed communities. Invited guest speakers will address local and regional issues. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites: ) (2.5 hrs lec/3 hrs lab/0 hrs OJT)

BIOL1120 Principles of General Biology 5 credits (F/S)
An introduction to the field of biology focusing on unifying biological principles. Includes the scientific method, homeostasis, biological molecules, metabolism, cell theory, cell structure and function, cellular reproduction, introductory genetics, evolution, ecology and population dynamics. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites: ) (4 hrs lec/2 hrs lab/0 hrs OJT)

BIOL1130 General Biology of Organisms 5 credits (S)
Introduction to the classification, function, and structure of microbes, plants, and animals. Includes cellular characteristics unique to each kingdom, general anatomy and physiology, reproduction and development, genetics, evolution and phylogeny. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites: BIOL1120 with a grade of "C" or better) (3 hrs lec/4 hrs lab/0 hrs OJT)

BIOL1140 Human Anatomy and Physiology I 4 credits(F/S)

A study of tissues and organ systems: integumentary, skeletal, muscular and nervous systems, and integrated control mechanisms of physiology. For all students in health-related fields. Helps to fulfill general education lab-science requirements. MTC goal area: (2) Critical Thinking, (3) Natural Sciences. (Prerequisites: BIOL1002 or BIOL1005 or BIOL1120 with grade of C or better) (2.5 hrs lec/3 hrs lab/0 hrs OJT)

BIOL1141 Human Anatomy and Physiology II 4 credits(F/S)

Continued study of body structure and function. Incorporates principles of chemistry, biochemistry, and molecular biology. A study of the endocrine system, cardiovascular system, immune system, respiratory system, urinary system, digestive system, and reproductive systems. For students in health related fields. Helps to fulfill general education lab-science requirements. Includes laboratory dissections. Builds on principles studied in BIOL1140. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: BIOL1140) (2.5 hrs lec/3 hrs lab/0 hrs OJT)

BIOL1150 Human Anatomy 4 credits(F/S)

A study of human anatomy covering basic histology and the structure of body systems. Includes histology and integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, immune, respiratory, digestive, urinary, and reproductive systems. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: BIOL1002 or BIOL1005 or BIOL1120 with grade of C or better. ) (2.5 hrs lec/3 hrs lab/0 hrs OJT)

BIOL1160 Human Physiology 4 credits(F/S)

A study of the functional relationships of the organ systems in the human body, biomolecular structure of important physiological molecules, and interrelationships of all life processes emphasizing homeostasis. Requires the use of variables, exponents, and logarithms to solve physiological equations. Lab experimentation. MTC goal areas: (2) Critical Thinking and (3) Natural Science. (Prerequisites: BIOL1150 with a grade of "C" or better or INEC student and successful completion with a grade of "C" or better in Integrated Science. College-level math required, and , successful completion of a college chemistry course suggested) (3 hrs lec/2 hrs lab/0 hrs OJT)

BIOL1165 The Biology of Aging 3 credits(F/S)

An introduction to the mechanisms of the human aging process. This course will provide a general understanding of aging as a biological process based on current theories; focusing on the genetic, structural, and functional changes that accompany it. Animal models and human case studies will be used to study cellular and human aging. Systemic structural and physiologic, age related illness, and age dependent illness will be studied as applications of general aging mechanisms. Intended as elective credit for allied health students and associate of arts students. Prerequisites:

BIOL1170 Microbiology 3 credits(F/S)

A study of the classification, structure, and function of microbes, with an emphasis on disease-causing bacteria, viruses, protozoa, and fungi. Includes: Control of microbial growth, basic laboratory techniques used in microbiol-

ogy; use of the microscope for viewing microbes, staining techniques, bacterial morphology and staining patterns, preparation of culture media, culture techniques, and microbial identification techniques. For students in health fields or students seeking a science course with laboratory for their liberal arts education. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: BIOL1120 or BIOL 1005 or BIOL 1002 with grade of C or better) (2 hrs lec/2 hrs lab/0 hrs OJT)

BIOL2000 Ornithology 3 credits(F/S)

An introduction to the study of birds. Topics include anatomy and physiology, systematics and taxonomy, behavior, flight, migration, reproduction, population ecology, evolution, impact on human society, and conservation. Laboratory periods will focus primarily on identification of birds in the field (early morning field trips and one or two all-day field trips). Additional lab fee required. MTC goal areas: (3) Natural Sciences and (10) People and the Environment. (Prerequisites: BIOL1120 or equivalent high school/college biology, and ) (2 hrs lec/3 hrs lab/0 hrs OJT).

BIOL2005 Molecular and Cell Biology 4 credits(F/S)

This course presents a study of the function and structure of eukaryotic and prokaryotic cells building upon the information introduced in several introductory biology courses for students preparing for careers in biology, biochemistry, medicine, and related fields. Topics include: organelles, membranes, DNA replication, transcription and translation, respiration, photosynthesis, cellular proteins, repair and recombination, cytoskeleton, signal transduction, cytogenetics, and molecular aspects of gene regulation. In lab current experimental techniques common to cellular and molecular biology fields will be explored and concepts will be integrated with problem-solving and scientific writing. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences. (Prerequisites: BIOL 1120 or BIOL 1141 or BIOL 1160 or BIOL 1170, College level math) (2.5 hrs lec/3 hrs lab/0 hrs OJT).

BIOL2160 Advanced Physiology 2 credits(F/S)

A more in-depth study of human physiology. Emphasizes integration of homeostatic control focusing on neuroendocrine physiology, musculoskeletal physiology, cardiopulmonary physiology, fluid and electrolyte balance, digestion, and immunology. Includes discussion of common pathologies affecting each body system and the use of variables, exponents, and logarithms to solve physiological equations. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: Successful completion of either BIOL1140 and BIOL1141 or BIOL1160, and college-level math) (2 hrs lec/0 hrs lab/0 hrs OJT)

BIOL2170 Pathophysiology 3 credits

A more in-depth study of human physiology across the life span as it is affected by the disease process, the body's attempts to compensate, and integration of systems to maintain homeostasis. Includes cardiopulmonary, gastrointestinal, reproductive, renal, immunological, endocrine, and neurological disruptions. Where relevant, environmental, cultural, and ethical influences on health are included. Critical thinking is emphasized. (Prerequisites: Completion of BIOL 1141 or BIOL 1160 with a grade of C or better; or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

BIOL2200 General Ecology 4 credits (F/S)
Exploration of principles that govern relationships between organisms and the environment for individuals, populations, communities, and ecosystems. Includes survey of local biological communities, experience in field observations and techniques, data collection, analysis, and interpretation. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites: BIOL1130 or equivalent, or instructor's consent) (2.5 hrs lec/3 hrs lab/0 hrs OJT)

BIOL2205 Limnology 3 credits (F/S/I)
A study of the biological, chemical and physical characteristics and interrelationships of inland lakes and streams. Different sampling methods and assessment techniques will be used to explore the ecology of aquatic ecosystems. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites: BIOL1120 or previous college biology; CHEM1210 recommended) (2 hrs lec/2 hrs lab/0 hrs OJT)

BIOL2210 Genetics 3 credits (I)
Introduction to genetics concepts and applications, with an emphasis on human genetics. Topics covered include: DNA, genes, Mendelian and non-Mendelian inheritance, molecular genetics, genetic manipulation of organisms, population genetics, applications and case studies related to human health and disease, bioethical discussions involving current genetic therapies and genetic research, and a study of genetic technology. Designed for allied health students, biology majors, and liberal arts students. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (9) Ethic and Civic Responsibilities. (Prerequisites: BIOL1120, BIOL1141, BIOL1160, or BIOL1170 or instructor's consent. (3 hrs lec, 0 hrs lab, 0 hrs OJT)

BIOL2300 Student Research 1-3 credits (I)
An opportunity for students to pursue areas of special interest by performing independent lab research projects designed and executed under the supervision of a faculty member. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: Successful completion of 8 credits of Biology, college-level math and ) (0-3 hrs lec/0-6 hrs lab/0 hrs OJT)

BIOL2400 Topics in Biology 1-3 credits (Arr)
Specific or advanced topics in biology not included in the regular curriculum. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: Depends on topic)

BIOL2999 Special Topics in Biology 1-3 credits (I)
Study of special topics in biology. Special course topics will be announced in the class schedule.

Building Construction

BLDG1400 Construction Safety 4 credits (F)
This course covers the safe operation of hand, portable, and stationary tools used in the industry. This course covers the basic requirements set by the OSHA legislation and provides students with basic hazard identification and abatement techniques. This course covers scaffolding and

ladders used in the construction industry. The student will demonstrate proper use of various types of wooden job-built and commercial scaffolds, ladders, and safe use of these types of equipment. (Prerequisites: None) (2 hrs lec/4 hrs lab/0 hrs OJT)

BLDG1407 Concrete Forming 3 credits (F)
This course covers forming procedures for concrete structures. Job-site built and commercial forming systems will be used. Concrete design and usage will be covered. (Prerequisites: BLDG1400 or concurrent enrollment) (1 hr lec/4 hrs lab/0 hrs OJT)

BLDG1410 Basic Framing 5 credits (F)
This course is an introduction to wood framing for residential structures including foundations, floors, and walls. This course will also cover the various materials and fasteners used in the construction industry. This course covers all the basic information necessary to calculate and assemble a basic common and/or hip roof combination in the construction of a small building. (Prerequisites: BLDG1400 or concurrent enrollment) (1 hr lec/8 hrs lab/0 hrs OJT)

BLDG1415 Cabinets and Laminates 2 credits (F)
This course covers the design, construction, and operation for finishing of residential cabinets. The student will become acquainted with both custom and manufactured cabinets. (Prerequisites: BLDG1400 or concurrent enrollment) (0 hrs lec/4 hrs lab/0 hrs OJT)

BLDG1420 Leadership and Trade/Labor Relations 2 credits (S)
This course covers the fundamentals of parliamentary procedure, roles of officers, committee functions, and how to conduct an effective meeting. This course will also cover the area of labor/management relations and the career development of the student. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

BLDG1425 Estimating For Building Construction 1 credit (S)
This class is designed for technical college students pursuing a career in building construction. This course covers how to make fast accurate estimates of construction material. The student will be introduced to the methods used to calculate material used by the carpenter or contractor. This will also cover estimating using a computer application. (Prerequisites: BLDG1435 or equivalent or concurrent enrollment and MATH1430, or equivalent) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1430 Building Site Lay-Out 1 credit (F)
This course covers the proper use of the builder's level, transit, and other related survey instruments as it relates to the construction industry. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1435 Blueprint Reading 3 credits (S)
This course covers the basics on interpreting and reading architectural drawing for the construction industry both in residential and commercial construction. They include but are not limited to: electrical, mechanical, painting, etc. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

BLDG1440 Stair Design and Construction 3 credits (S)

This course covers basic stair layout and design for the beginning stair builder. The student will assemble a stairway to a deck using the training applications studied in the course. (Prerequisites: BLDG1400 or concurrent enrollment) (1 hr lec/4 hrs lab/0 hrs OJT)

BLDG1445 Framing With Metal and Welding 3 credits (S)

This course covers framing with metal for residential and commercial construction. This course also covers arc and oxy-acetylene welding, MIG, brazing, and cutting. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (1 hr lec/4 hrs lab/0 hrs OJT)

BLDG1450 Interior/Exterior Construction 3 credits (S)

This course covers the basics in assembly of interior and exterior trim materials in residential construction. This course also covers the introduction to heat loss calculation, product selection, and safe installation of insulation and drywall products. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (0 hrs lec/6 hrs lab/0 hrs OJT)

BLDG1465 Framing With Metal 2 credits (S)

This course covers framing with metal for residential and commercial construction. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (1 hr lec/2 hrs lab/0 hrs OJT)

BLDG1500 Residential Decks 1 credit (S)

This course covers the basic: design, framing, materials, stair construction, hand rail, benches, and finishing techniques for building decks for the home. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1503 Construction Safety & Health Regulations 1 credit (Arr)

This course covers the basic requirements set by OSHA legislation and provides students with basic hazard identification and abatement techniques. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

BLDG1505 Computerized Estimating for Building Construction 1 credit (S)

This course is designed for students interested in computerized estimating. The course covers how to make fast, accurate estimates of construction jobs using a computer and estimating software. The student will be introduced to basic computer estimating used to calculate building materials and job costs. (Prerequisites: BLDG1435 or equivalent, and MATH1530) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1510 Resource-Efficient Building 1 credit (Arr)

This course covers the proper use of building construction materials containing both post-industrial recycled components. The recycling process and material within existing markets will also be covered. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1515 Metal Work 1 credit (S)
This course covers lay-out and installation of metal door frames, suspended ceilings, door hardware, garage doors, and metal fixtures. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1520 Drywall Finishing 1 credit (S)
This course covers the basic drywall taping and finishing. (Prerequisites: BLDG1400, BLDG1410, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG1525 Welding 1 credit (S)
This course covers arc and oxy-acetylene welding, MIG, brazing, and cutting. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

BLDG2412 Site Preparation and Concrete Formwork 5 credits (F)

This course covers the lay-out of the building site, excavation for the foundation, forming of the footings and foundation walls, placement of reinforcing steel, estimating and placement of the concrete, installation of foundation drainage systems, and backfilling the foundation. This course will be held at an on-site project location. (Prerequisites: BLDG1405) (1 hr lec/8 hrs lab/0 hrs OJT)

BLDG2414 Site Preparation and Foundation 4 credits (F)

This course covers the lay-out of the building site, excavation for the foundation, forming of the footings and foundation walls, placement of reinforcing steel, estimating and placement of the concrete, installation of foundation drainage systems, and backfilling the foundation. (Prerequisites: BLDG1405) (1 hr lec/6 hrs lab/0 hrs OJT)

BLDG2415 Floor and Wall Framing 3 credits (F)

This course covers residential floor and wall framing. This course will be held at an on-site project location. (Prerequisites: BLDG1410) (0 hrs lec/6 hrs lab/0 hrs OJT)

BLDG2420 Roof Framing 3 credits (F)

This course covers roof and ceiling framing using sawn lumber, manufactured framing components, and trusses. Framing components will be designed, constructed, and installed, braced, and sheathed. This course will be held at an on-site project location. (Prerequisites: BLDG1410) (1 hr lec/4 hrs lab/0 hrs OJT)

BLDG2425 Understanding Working Drawings 2 credits (F)

This course covers the estimating, scheduling, and plan review of construction drawings for construction of an actual site built project. The project drawings will be the drawings to be studied during the course and the estimating, scheduling, and plan review will use those drawings, and others supplied by the instructor. (Prerequisites: BLDG1435) (1 hr lec/2 hrs lab/0 hrs OJT)

BLDG2430 Sound and Energy Control 2 credits (F)

This course covers the heat loss in buildings, moisture problems and prevention, installation of insulation types, indoor air quality, and sound control. This course will be held at an on-site project location. (Prerequisites: BLDG1450) (1 hr lec/2 hrs lab/0 hrs OJT)

BLDG2435 Exterior Finishing 4 credits (S)
This course covers construction of exterior finishes for residential construction including siding, cornices, roofing, attic ventilation, and window and door installation. This course will be held at an on-site project location. (Prerequisites: BLDG1450) (1 hr lec/6 hrs lab/0 hrs OJT)

BLDG2440 Stair Construction 2 credits (S)
This course covers stair construction including design, layout and cutting stringers, and assembly of the stairway. Installation of wall and floor coverings will be presented. This course will be held at an on-site project location. (Prerequisites: BLDG1440) (1 hr lec/2 hrs lab/0 hrs OJT)

BLDG2445 Introduction to Construction Management 2 credits (S)
This course covers job coordination, scheduling, preparation and presentation of weekly progress reports, expediting of materials, insurance, and Minnesota Contractor's License requirements. Accounting requirements of construction projects will be addressed. Basic design problems will be covered. This course will be held at an on-site project location. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

BLDG2450 Interior Finishing/Casework 6 credits (S)
This course covers interior finishing systems, including drywall, installation of interior doors, window and door trim, base, hardware, suspended ceilings, closet shelving, and installation of kitchen and bathroom cabinets and counter tops for both new construction and remodeling projects. This course will be held at an on-site project location. (Prerequisites: BLDG1450) (1 hr lec/10 hrs lab/0 hrs OJT)

BLDG2455 Selection and Use of Construction Materials 3 credits (Arr)
This course covers use of materials used in the construction industry such as concrete, wood, plastics, steel, aluminum, minerals, and paper products. Material selection, alternative products, specifications, testing, and product advantages and disadvantages will be studied. Safe operation and use of power tools, scaffolds, ladders, and fall protection will be covered. Rigging and signals for cranes will be addressed. Leadership issues will be presented. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

BLDG2507 Building Construction Internship 1-4 credits (Arr)
This course provides the student with work site experience in which skills and knowledge learned in previous courses may be applied. These internship experiences include safety procedures, concrete forming, framing, exterior trim/finish, interior trim, insulating, and drywall installation. (Prerequisites: Building construction student in good standing [3.0 GPA or greater] and instructor's consent) (0 hrs lec/0 hrs lab/3-12 hrs OJT)

BLDG2999 Special Topics in Building Construction 1-3 credits (I)
Study of special topics in building construction. Special course topics will be announced in the class schedule.

Business

BUS1600 Introduction to Marketing 3 credits (F/S)
This course is an introduction to the operation and organization of business enterprises and will provide students with a comprehensive and foundational view of business organizations, operations, finance, production, distribution, business law, and other business concepts and activities. Students will learn how these aspects of business enterprises are essential to our economic system and the global economy. Required for students enrolled in Business Administration Associate in Science degree. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

BUS1801 Discovering Computers Level 1 1 Credit
This is a beginning level course in computer literacy. Topics include basic skills and terminology needed to function in a work environment to include Windows, Internet access, and e-mail. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1802 Discovering Computers Level 2 1 Credit
This is a continuation of the beginning course in computer literacy. Topics covered include basic skills and terminology needed to function in a work environment; including word processing, spreadsheets, databases, graphics, and sound. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1811 Basic Keyboarding 1 Credit
This course covers the development of basic keyboarding techniques using the touch method on the computer. Emphasis will be on learning the touch method of typing alphabetic, punctuation, and numeric keys. In addition, skill development will be included. Basic formatting and proofreading skills will be introduced. The keyboarding goal will be the attainment of a minimum rate of 20 net words per minute with two errors or less on a two-minute timed test. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (0 hrs lec/2 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
(S) = Spring Semester
(F/S) = Fall & Spring Semesters
(I) = Intermittent
(Arr) = Arranged

BUS1821 Windows 98 Level 1 1 Credit

This course will introduce Windows concepts and terminology and the usage of the mouse and keyboard. Topics include opening, maximizing, minimizing, scrolling, and selecting in the windows. The course will cover disk and file management including formatting, copying, renaming, and deleting. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1802 or instructor consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1822 Windows 98 Level 2 1 Credit

This course continues using the Windows concepts and terminology. Topics include modifying your desktop, customizing your computer, and advanced file and web searching. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1821 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1831 Windows XP Level 1 1 Credit

This course will introduce Windows concepts and terminology and the usage of the mouse and keyboard. Topics include opening, maximizing, minimizing, scrolling, and selecting in the windows. The course will cover disk and file management including formatting, copying, renaming, and deleting. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: None)

BUS1832 Windows XP Level 2 1 Credit

This course continues using the Windows concepts and terminology. Topics include modifying your desktop, customizing your computer and advanced file and web searching. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1831 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1851 Microsoft Word 2000 Level 1 1 Credit

This course provides students with the opportunity to learn MS WORD and to utilize a microcomputer as a word processor. Students will learn to create, edit, format, open, save, print, manage and enhance documents. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1852 Microsoft Word 2000 Level 2 1 Credit

This course provides students with the opportunity to learn MS Word and to utilize a microcomputer as a word processor. Students will learn to insert tables and charts, generate mailing list using mail merge and create a newsletter. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1851 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1853 Microsoft Word 2000 Level 3 1 Credit

This course provides students with the opportunity to learn MS Word and to utilize a microcomputer as a word processor. Students will learn to insert table of contents and indexes, create an online form and work with macros using Visual Basic. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1852 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1861 Microsoft Word 2002 Level 1 1 Credit

This course provides students with the opportunity to learn MS Word 2002 and to utilize a microcomputer as a word processor. Students will learn to create, edit, format, open, save, print, manage and enhance documents. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1862 Microsoft Word 2002 Level 2 1 Credit

This course provides students with the opportunity to learn MS Word and to utilize a microcomputer as a word processor. Students will learn to insert tables and charts, generate mailing list using mail merge and create a newsletter. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1861 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1863 Microsoft Word 2002 Level 3 1 Credit

This course provides students with the opportunity to learn MS Word and to utilize a microcomputer as a word processor. Students will learn to insert table of contents and indexes, create an online form and work with macros using Visual Basic. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1862 or instructor's approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1881 MS Excel 2000 Level 1 1 Credit
This course introduces the students to MS Excel 2000 software used to analyze financial data. It covers essential spreadsheet skills; planning, building, testing, and formatting financial worksheets; enhancing and printing worksheets; using, formulas, and references and graphing, and working with multiple worksheets. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1882 Excel 2000 Level 2 1 Credit
This course is a continuation of MS Excel 2000 Level 1. It covers essential financial functions, data tables, formulas, querying a worksheet database, creating templates, and working with multiple worksheets. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1881 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1883 Excel 2000 Level 3 1 Credit
This course is a continuation of MS Excel 2000 Level 2. It covers using Visual Basic for spreadsheet applications, auditing, data validation, solving complex problems and importing external data. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1882 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1891 MS Excel 2002 Level 1 1 Credit
This course introduces the students to MS Excel 2002 software used to analyze financial data. It covers essential spreadsheet skills; planning, building, testing, and formatting financial worksheets; enhancing and printing worksheets; using, formulas, and references and graphing, and working with multiple worksheets. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1892 Excel 2002 Level 2 1 Credit
This course is a continuation of MS Excel 2002 Level 1. It covers essential financial functions, data tables, formulas, querying a worksheet database, creating templates and working with multiple worksheets. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1891 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1893 Excel 2002 Level 3 1 Credit
This course is a continuation of MS Excel 2002 Level 2. It covers using Visual Basic for spreadsheet applications, auditing, data validation, solving complex problems and importing external data. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1892 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1911 PowerPoint 2000 1 Credit
This course covers the creation of a presentation using PowerPoint 2000, a tool used to create multimedia presentations. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1921 PowerPoint 2002 1 Credit
This course covers the creation of a presentation using multimedia software package. This software can be used to create a professional presentation using a projection device attached to a personal computer. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1941 MS Access 2000 Level 1 1 Credit
This course introduces the student to MS Access 2000 database software used to manage data. It covers planning, creating, testing, and changing database files; adding, changing, and deleting records from a database; querying database tables. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1942 MS Access 2000 Level 2 1 Credit
This course is a continuation of MS Access 2000 Level 1 microcomputer database software. Course topics include reports, forms, combo boxes, hyperlinks, subforms, and creating an application system using macros and wizards. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1941 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1943 MS Access 2000 Level 3 1 Credit
 This course is a continuation of MS Access 2000 Level 2 microcomputer database software. Topics covered include creating a report using Design View, customizing forms using Visual Basic, and administering a database system. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1942 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1951 MS Access 2002 Level 1 1 Credit
 This course introduces the student to microcomputer database software used to manage data. Course topics include planning, creating, testing, and changing database files; adding, changing, and deleting records from a database; querying database tables. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1952 MS Access 2002 Level 2 1 Credit
 This course is a continuation of MS Access 2002 Level 1 microcomputer database software. Course topics include reports, forms, combo boxes, hyperlinks, subforms, and creating an application system using macros and wizards. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1951 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1953 MS Access 2002 Level 3 1 Credit
 This course is a continuation of MS Access 2002 Level 2 microcomputer database software. Course topics include creating a report using Design View, customizing forms using Visual Basic, and administering a database system. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1952 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1971 FrontPage 2000 1 Credit
 Students learn how to create World Wide Web home pages using Microsoft FrontPage 2000. Hands-on exercises will guide students through the design and construction of a home page with links to other documents and sites. Students will also learn to use graphics and other multimedia items in their home pages. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS1981 FrontPage 2002 1 Credit
 Students learn how to create World Wide Web home pages using Microsoft FrontPage 2002. Hands-on exercises will guide students through the design and construction of a home page with links to other documents and sites. Students will also learn to use graphics and other multimedia items in their home pages. This course is offered in a flex lab setting (self-paced) and is intended to be used primarily for workforce development and personal growth. This course is acceptable for a special workforce development certificate program and is not intended for other programs at Lake Superior College. (Prerequisites: BUS1811 or instructor approval) (0 hrs lec/2 hrs lab/0 hrs OJT)

BUS2500 Business Management Applications 3 credits (F/S)
 This course requires students to apply knowledge, skills and strategies to multi-disciplinary business case studies, simulations and team projects. Students will apply learning from other courses taken as part of the Business Administration AS degree Curriculum. Case studies and projects will encompass management, marketing, economics, accounting, statistics and communications skills in a team environment. Required for students enrolled in Business Administration Associate in Science degree. (Prerequisites: BUS1600 and a minimum of 30 additional credits from the Business Administration AS Degree Business Core) (3 hrs lec/0 hrs lab/0 hrs OJT)

Computer Aided Design Engineering

CADE1401 Orthographic Detailing & Dimensioning 3 credits (F)
 This course covers orthographic projection and dimensioning techniques as to Industrial and Engineering Standards. (Prerequisites: ) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE1405 Introduction to CAD Engineering Technology 1 credit (F/S)
 This course covers an introduction to the CAD Engineering Technician profession and acquaints students with an array of career opportunities within the field. Career possibilities will be explored through a variety of hands-on activities including a company tour and computer-aided design applications. Emphasis is on an understanding of the job market, types of employment available, the technician's role in the engineering profession, and skills needed to succeed. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

CADE1407 Engineering CAD 5 credits (F/S)
 This course provides a foundation for use in the civil, architectural, and CAD engineering fields. (Prerequisites: See Advisor) (1 hr lec/8 hrs lab/0 hrs OJT)

CADE1410 Sections & Auxiliary Views 2 credits (F)
 This course will focus on further orthographic delineation used by industry for complicated engineering drawings. This course will also cover plane projections obtained from planes other than the horizontal, frontal, and profile planes. (Prerequisites: CADE1401) (1 hr lec/2 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

CADE1420 Manufacturing Processing & Design 2 credits (F)

This course covers machine design and technical component size selection along with machine function characteristics and purposes, as they pertain to manufacturing processes used in industry and is designed to provide an understanding of manufacturing principles and practices including, the economic impact of the various processes. (Prerequisites: CADE1401) (1 hr lec/2 hrs lab/0 hrs OJT)

CADE1430 Geometric Dimensioning and Tolerancing 2 credits (F)

This course covers alternatives to Conventional Dimensioning Techniques. (Prerequisites: CADE1401) (1 hr lec/2 hrs lab/0 hrs OJT)

CADE1450 Mechanical Details 3 credits (S)

This course covers drawing applications to several kinds of assemblies. The student will also learn systems of drawing integration to product definition. (Prerequisites: CADE1401) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE1460 Sheet-Metal Development 3 credits (S)

This course covers graphical solutions to points, lines, and planes in space, along with composite development. (Prerequisites: CADE1401) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2400 Engineering CAD II 5 credits(F/S)

This course covers intermediate graphic image production through the use of computer hardware, software, and peripheral devices. (Prerequisites: CADE1407 or instructor's consent) (1 hr lec/8 hrs lab/0 hrs OJT)

CADE2407 Engineering Technology Internship 1-7 credits (Arr)

This course provides the student with work site experience in which skills and knowledge learned in previous courses may be applied. These internship experiences include safety procedures, quality control systems, personnel procedures, company organization, contractual agreements, and other employer expectations. Technical skills and knowledge can include surveying, inspection, testing, computer design, and architectural applications. Students can register for varying credits based on their planners and number of hours of expected work. One credit is equivalent to 48 hours of work time. (Prerequisites: Instructor consent) (0 hrs lec/0 hrs lab/3-21 hrs OJT)

CADE 2410 Engineering CAD III 5 credits(F/S)

This course covers advanced topic programming, customization, 3D drawing, and menu modification. (Prerequisites: CADE2400 or instructor's consent) (1 hr lec/8 hrs lab/0 hrs OJT)

CADE2420 Electrical/Electronic Drawings 3 credits (F/S)

This course covers basic introductions to electrical and electronics drafting fields with the incorporation of Computer Aided Design. (Prerequisites: CADE2400 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2430 Industrial Piping Layout 3 credits(F/S)

This course covers piping drafting, design, and layout, preparing students for piping engineering fields. (Prerequisites: CADE2400 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2440 Fluid Power Design 3 credits(F/S)
This course entails the engineering details and the description of complete hydraulic systems through the use of CAD engineering design. (Prerequisites: CADE2400 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2450 Technical Illustration 3D 3 credits(F/S)

This course will cover the illustrative techniques used by industry to technically detail 2D and 3D graphics of engineered designs for their use in catalogs, public relations, and promotional designs. (Prerequisites: CADE2410 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2460 Jigs and Fixtures 3 credits(F/S)

This course covers jig and fixture tool design for the Industrial Machining Occupations. (Prerequisites: CADE2410) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2470 Design Project 5 credits(F/S)

This course covers completion of incorporating total learning experiences into workable, economical designs using engineering procedures. (Prerequisites: CADE2410) (1 hr lec/8 hrs lab/0 hrs OJT)

CADE2480 Mechanical Desktop 3 credits(F/S)

This course covers feature based parametric design for Part Modeling with the incorporation of Computer Aided Design. (Prerequisites: CADE2410 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

CADE2700 Microstation I 5 credits(F/S)

This course covers a broad range of knowledge of the elementary CAD concepts necessary to complete a simple design. Fundamentals are covered and practiced extensively to better prepare the student for the more advanced topics covered in Microstation II. Lab fees will be charged for lab courses. (Prerequisites: CADE2410 or instructor's consent) (2 hrs lec/6 hrs lab/0 hrs OJT)

CADE2710 Microstation II 5 credits(F/S)

This course covers a broad range of knowledge of intermediate and advanced concepts necessary to complete a basic design. Fundamentals are covered and practiced extensively to better prepare the student for the more advanced topics. Lab fees will be charged for lab courses. (Prerequisites: CADE2700 or instructor's consent) (2 hrs lec/6 hrs lab/0 hrs OJT)

CADE2720 Microstation III 6 credits(F/S)

This course covers a broad range of knowledge for the advanced CAD concepts necessary to complete an intermediate design. Customization and productivity are covered and practiced extensively to better prepare the student for the more advanced topics covered in CAD Engineering design. (Prerequisites: CADE2710 or instructor's consent) (2 hrs lec/8 hrs lab/0 hrs OJT)

CADE2999 Special Topics in Computer Aided Design Engineering 1-3 credits (I)

Study of special topics in computer aided design engineering. Special course topics will be announced in the class schedule.

Civil Engineering Technology

CETT1402 Introduction to Surveying 5 credits (F)

This course covers the basic skills needed for surveying. The course stresses the proper care and handling of equipment, fundamental concepts of leveling, horizontal and vertical distances, and format, neatness, and accuracy of field notes. (Prerequisites: College-level math and  ) (1 hr lec/8 hrs lab/0 hrs OJT)

CETT1410 Introduction to Material Testing 3 credits (S)

This course covers an introduction to construction materials and material testing including concrete field tests, gradations, and bituminous testing. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

CETT1420 Route Survey 4 credits (S)

This course covers defining, calculating, and laying out horizontal and vertical alignments for roadways. Emphasis will be placed on the student developing neatness of calculations, use of advanced survey instruments, and operation of HP48g. (Prerequisites: CETT1402 or instructor's consent) (2 hrs lec/4 hrs lab/0 hrs OJT)

CETT1430 Civil CAD Applications 4 credits (S)

This course covers advanced AutoCad software commands for use with civil survey data. In addition, students will prepare Civil Engineering drawings using these commands. (Prerequisites: CADE1407) (1 hr lec/6 hrs lab/0 hrs OJT)

CETT1440 Engineering Problem Solving 2 credits (S)

This course is designed to give students the ability to take previously learned mathematical concepts and apply them to engineering applications. In addition, the course will cover the use of an engineering calculator and help students learn critical thinking and problem solving techniques. (Prerequisites:   and mathematics) (1 hr lec/2 hrs lab/0 hrs OJT)

CETT1500 Introduction to Microstation/Geopak 4 credits

This course will introduce students to the various aspects of the Geopak software along with reviewing Microstation functions. Students will prepare drawings to industry standards. (Prerequisites: CADE2700 – Microstation 1 or instructor consent based on previous Microstation experience. College-level math and  ) (1 hr lec/6 hrs lab/0 hrs OJT)

CETT1505 Geopak Design 4 credits

This course covers the various aspects of a highway design. The use of horizontal and vertical curves, earthwork computation and balancing, and plan set preparation will be emphasized. The final project will be drawn using industry standards and Geopak. (Prerequisites: CADE2700 or instructor consent based on previous Microstation experience. College-level math and  ) (1 hr lec/6 hrs lab/0 hrs OJT)

CETT1510 Geopak Survey 3 credits

This course will introduce students to the survey and site development features of Geopak. Topics covered include data formats, linework, importing of survey data, surface creation, and grading. Labeling and printing drawings will also be covered.

(Prerequisites: CADE 2700 or instructor consent based on previous Microstation experience.   and math.) (1 hr lec/4 hrs lab/0 hrs OJT)

CETT2400 Intermediate Survey 3 credits (F)

This course covers the fundamentals of surveying at an advanced level. The student will demonstrate competency in four critical areas of the Civil Engineering Technology field. (Prerequisites: CETT1402) (1 hr lec/4 hrs lab/0 hrs OJT)

CETT2407 Engineering Technology Internship 1-7 credits (Arr)

This course provides the student with work site experience in which skills and knowledge learned in previous courses may be applied. These internship experiences include safety procedures, quality control systems, personnel procedures, company organization, contractual agreements, and other employer expectations. Technical skills and knowledge can include surveying, inspection, testing, computer design, and architectural applications. The students can register for varying credits based on their planners and number of hours of expected work. One credit is equivalent to 48 hours of work time. (Prerequisites:   and mathematics) (0 hrs lec/0 hrs lab/3-21 hrs OJT)

CETT2410 Stormwater Management 3 credits (F)

This course covers the fundamentals of hydraulics and hydrology as they relate to the design of roadways, subdivisions, and storm/sanitary sewer design. It covers both the theory of hydraulics along with practical applications in storm sewer, culvert, and retention pond design. (Prerequisites:   and mathematics) (2 hrs lec/2 hrs lab/0 hrs OJT)

CETT2420 Land Survey Systems 3 credits (S)

This course covers an introduction to the public land system, legal descriptions of properties, basic mapping terminology, and how legal land descriptions affect property transfer. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

CETT2430 Site Development 3 credits (F)

This course covers the various aspects of a property subdivision. The city of Duluth regulations are used as a guide. The project is CAD drawn using industry standard software. (Prerequisites: CETT1430) (1 hr lec/4 hrs lab/0 hrs OJT)

CETT2440 Civil Estimating 3 credits (S)

This course covers the calculation of quantities from highway, bridge, building, and site plans. (Prerequisites: CADE1407) (2 hrs lec/2 hrs lab/0 hrs OJT)

CETT2450 Highway Design 4 credits (S)

This course covers the various aspects of a highway design. The use of horizontal and vertical curves, earthwork computation and balancing, and storm water drainage will be emphasized. The final project will be drawn using industry standards and AutoCad. (Prerequisites: CETT1430) (1 hr lec/6 hrs lab/0 hrs OJT)

CETT2460 Advanced Survey 3 credits (S)

This course covers advanced topics in surveying and is designed for the student who plans to pursue surveying as a major career goal. (Prerequisites: CETT1402) (0 hrs lec/6 hrs lab/0 hrs OJT)

CETT2999 Special Topics in Civil Engineering Technology 1-3 credits (I)
Study of special topics in civil engineering technology. Special course topics will be announced in the class schedule.

Chemistry

CHEM1110 Aspects of Chemistry I 3 credits (F/S)
An introduction to the study of chemistry and its applications requiring a minimum of mathematics. The topics of this course include an introduction to stoichiometry, nomenclature, bonding, gas laws, and acids and bases. This course is intended primarily for those with no or a limited or outdated background in chemistry. MTC goal area: (3) Natural Sciences. (Prerequisites: MATH0460 or MATH1420. A CHEM1110-CHEM1210 sequence may not be taken to meet the laboratory science requirement) (2 hrs lec/2 hrs lab/0 hrs OJT)

CHEM1111 Aspects of Chemistry II 2 credits (S)
This course is a continuation of the CHEM1110-CHEM1111 sequence. Topics covered in this course include solution chemistry, oxidation/reduction, nuclear chemistry, and topics in organic chemistry. MTC goal area: (3) Natural Sciences. (Prerequisites: CHEM1110 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

CHEM1210 General Chemistry I 5 credits (F/S)
This course is the first semester of a two-semester sequence and is designed for those students who are science majors. The basic fundamentals of chemistry will be covered, including modern atomic theory, the periodic table, stoichiometry, nomenclature, solutions, bonding, solution chemistry, the energy of reactions, properties of gases, and properties of solids and liquids. MTC goal area: (3) Natural Sciences. (Prerequisites: High school chemistry or CHEM1110 and high school algebra, MATH 0460 or MATH1420) (4 hrs lec/2 hrs lab/0 hrs OJT)

CHEM1211 General Chemistry II 5 credits (S)
This course is the second semester of a two-semester sequence and is designed primarily for those students who are science majors. The basic fundamentals of chemistry will be studied, including equilibrium, aqueous solutions, (acids, bases, and salts), solubility, electrochemistry, kinetics, chemistry of metals, and basic organic chemistry. MTC goal area: (3) Natural Sciences. (Prerequisites: CHEM1210 or instructor's consent) (4 hrs lec/2 hrs lab/0 hrs OJT)

CHEM1310 General Chemistry of Solutions 3 credits (F/S)
This course is designed for students enrolling in the health programs. It includes discussion of measurements, bonding, and some medical properties of atoms and ions. Also includes moles, stoichiometry, solutions, equilibrium, pH and discussion of organic chemistry and biochemistry. MTC goal area: (3) Natural Sciences. (Prerequisites: High school chemistry or CHEM1110 and high school algebra or MATH0460 or MATH1531) (2 hrs lec/2 hrs lab/0 hrs OJT)

CHEM2000 Quantitative Analysis 5 credits (F/S)
This course introduces the fundamental principles and applications of quantitative chemical analysis emphasizing on classical, wet chemical, and chemical equilibria methods. Topics covered will include: the statistical handling of quantitative analysis data, gravimetric determinations, acid-base titrations, complexation and precipitation titration, electrochemical analysis, spectrochemical analysis, and chromatographic separation techniques. Laboratory included: MTC goals: (2) Critical Thinking, (3) Natural Sciences. (Prerequisites: CHEM 1210 and CHEM 1211. College-level math and ) (3.5 hrs lec/3 hrs lab/0 hrs OJT).

CHEM2110 Elementary Organic Chemistry I 5 credits (F)
The first of a two-semester sequence of courses in elementary organic chemistry. The course lecture topics include the study of structures, properties, syntheses and reactions of the major classes of organic compounds. The course also includes the basic principles of chemical bonding, kinetics, mechanisms and molecular spectroscopy. The laboratory portion of the course consists of laboratory preparation and study of the chemical and physical properties of organic compounds. MTC goal area: (3) Natural Sciences. (Prerequisites: CHEM1211) (3.5 hrs lec/3 hrs lab/0 hrs OJT)

CHEM2111 Elementary Organic Chemistry II 5 credits (S)
The second of a two-semester sequence of courses in elementary organic chemistry. The course lecture topics include the study of structures, properties, syntheses, and reactions of the major classes of organic compounds. The course also includes the basic principles of chemical bonding, kinetics, mechanisms and molecular spectroscopy. The laboratory portion of the course consists of laboratory preparation and study of the chemical and physical properties of organic compounds. MTC goal area: (3) Natural Sciences. (Prerequisites: CHEM2110) (3.5 hrs lec/3 hrs lab/0 hrs OJT)

CHEM2999 Special Topics in Chemistry 1-3 credits (I)
Study of special topics in chemistry. Special course topics will be announced in the class schedule.

Computer Information Systems

CIS1400 Introduction to Computers 2 credits (F/S)
This course is designed for non-CIS majors who are novice computer users. It covers basic computer terminology and an introduction to the Windows operation system. Students will also have the opportunity, through hands-on projects, to work with some of the most popular desktop tools including word processing, spreadsheets, database applications, presentation software, and simple Web page design. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

<p>Term Course Codes: (F) = Fall Semester (S) = Spring Semester (F/S) = Fall & Spring Semesters (I) = Intermittent (Arr) = Arranged</p>
--

CIS1401 Computer Literacy 3 credits (I)

This course is designed for the novice computer user. It traces the historical development, examines social issues of computer technology, and discusses the capabilities, organization, and uses of the modern computer. It covers the basic computer terminology, computer software, the system unit, secondary storage, communication and the networking related to microcomputers. Students will learn how a computer operates and will have the opportunity, through hands-on experience, to work with computer software consisting of word processing, spreadsheets, database management, and the Internet. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1404 Introduction to Internet 1 credit (I)

This course is designed for the novice computer user who is interested in learning about the many resources now available on the Internet. The course provides a comprehensive overview of the World Wide Web (WWW), including the usage for research. The course provides hands-on experience using Internet browsers. (Prerequisites: Working knowledge of Windows software) (0 hrs lec/2 hrs lab/0 hrs OJT)

CIS1406 Web Programming 3 credits (F)

Learn how to create World Wide Web home pages using Hypertext Markup Language (HTML). Hands-on exercises will guide students through the design and construction of a home page with links to graphics, documents, multimedia, and forms. This course will cover the basic and advanced concepts of web site design using HTML. Students will have exposure to multiple WYSIWYG web editors. (Prerequisite: Proficiency in Internet) (1 hr lec/2 hrs lab/0 hrs OJT)

CIS1407 Introduction to MS FrontPage 2 credits (I)

This foundation course introduces the concepts, vocabulary, and procedures associated with MS FrontPage and the Internet. Topics include development of the Internet and FrontPage, prospects for using FrontPage for Internet and Intranet applications, options available for doing business on the Internet, forms related to e-commerce, tools used to build a Web presence, features of Web sites, and maintenance. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

CIS1408 Dynamic HTML/XML 3 credits (F)

This course will help students understand the fundamentals of dynamic HTML and XML scripting using an effective problem-solving approach. The course includes coverage of creating dynamic text and images, positioning, data binding and structuring data. (Prerequisites: CIS1406) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1410 Web Site Design 3 credits (S)

This course offers a conceptual methodology by taking the student through the concepts and techniques that a Web site developer should ask before anything is designed and implemented on the Web. It also covers Web site design using current software packages. (Prerequisites: CIS 1406) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1412 Web Design, Graphics and Animation 4 credits (S)

Using current software packages, students will learn to create and manipulate web pages, digitized photographic images, graphics, and animation. Students will be exposed

to the best practices in web page design, graphic design and animation being used in the web. (Prerequisites: CIS1400 or CIS1401, CIS1406) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS1415 Intro to Programming Principles 4 credits (F)

This course introduces the student to the essential ideas and skills of computer programming. Students learn about data representation, algorithms, and program logic, and develop their skills through application of these ideas using flowcharts, pseudocode, and hands-on programming: planning, coding and testing. (Prerequisites: CIS1519, MATH0450, Elementary Algebra CPT score above 45) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS1419 Introduction to E-Commerce 2 credits (S)

This foundation course introduces the concepts, vocabulary, and procedures associated with e-commerce and the Internet. Topics include development of the Internet and e-commerce, prospects for business-to-business and business-to-consumer e-commerce, options available for doing business on the Internet, marketing issues related to e-commerce, tools used to build an e-commerce Web site, features of e-commerce Web sites, payment options, security issues, and customer service. (Prerequisites: CIS1406) (1 hr lec/2 hrs lab/0 hrs OJT)

CIS1441 Mini/Mainframe Operating Systems I 3 credits (S)

This course introduces the students to operating system utility control statements, job control, and job control statements. It also introduces command control procedures, and command creation tools. Students will be able to describe the CL and OS/400 structure. (Prerequisites: CIS1400 or CIS1401, CIS1415 or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1510 Microcomputer Database 3 credits (F)

This course introduces the student to microcomputer database software used to manage data. It covers essential database skills; planning, creating, testing, and changing database files; adding, changing, importing, and deleting records from a database; querying database tables; designing, creating, and using forms. The course also introduces students to more advanced skills in the use of desktop database management, including integration of databases with other tools, advanced queries, and in introduction to basic programming techniques for development of a database management system. (Prerequisites: CIS1519) (2 hr lec/2 hrs lab/0 hrs OJT)

CIS1515 Microcomputer Spreadsheets 3 credits (F)

This course introduces the student to microcomputer spreadsheets software used to analyze financial data. It covers essential Windows skills; planning, building, testing and formatting financial worksheets; enhancing and printing worksheets; using functions, formulas, and references; charting and graphing worksheets; using solver for complex problems; managing data for worksheets; and working with spreadsheets. Additionally, this course will cover advanced topics in spreadsheets, including macros, pivot tables, advanced functions, VBA, and what-if analysis. (2 hr lec/2 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

CIS 1519 Survey of Operating Systems 3 credits (F)

This course is a practical introduction to microcomputer operating systems, intended to enable computer users to understand and work effectively in a variety of software environments. The student will learn general principles of operating systems, and will develop skills in navigation and file and process management in various PC operating systems using both graphical (GUI) and command line (CLI) interfaces, and in the use of common PC applications. (Prerequisites: College-level math and ) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1521 Microcomputer Operating Systems 3 credits (F/S)

This course introduces the novice computer user to principles of microcomputers and operating systems (OS's). The student learns implementation details of several PC OS's, and builds skills for using, installing, configuring, and maintaining various PC OS's, and using common PC applications. (Prerequisites:  and math) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1560 Web Server Application 3 credit (S)

The student will receive instruction on basic server setup and the issues involved in Web server administration. The Web servers covered in this class will be UNIX Web server and Internet Information Server. (Prerequisites: CIS 1519 or CIS 1521) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1610 JavaScript/CGI Programming 4 credits (I)

This course teaches students to make Web pages interactive using the JavaScript programming language. Students will add JavaScript code to HTML documents to add effects to pages. JavaScript syntax, the JavaScript object model, and object oriented principles are covered in this course. The use of Common Gateway Interface (CGI) to connect Web pages to databases and other programs on the server will be taught. Students will learn to write CGI scripts that process forms sent from Web pages. Exposure to HTTP, Server side and Client side CGI scripts will be introduced. (Prerequisites: CIS1415 or instructor consent) (2 hrs lec/4 hrs lab/0 hrs OJT)

CIS1621 Introduction to C++ Programming Language 4 credits (I)

This course teaches the introductory concepts and tools associated with the C++ programming language. Many familiar applications are written using the C++ language. Topics covered will include classes, objects, I/O and built in functions, loop structures, decision structures and array manipulation. (Prerequisites: CIS1415) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS1640 Beginning COBOL 4 credits (S)

This course introduces COBOL programming language for use on mainframe and minicomputer systems. Topics include structured program design, arithmetic operations, control logic, report generation, string processing, editing, table processing, and advanced editing and report writing. (Prerequisites: CIS1415, or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS1650 Intro to Visual Basic 4 credits (I)

This course teaches the use of Visual Basic programming language to solve problems on a computer. Topics covered will include VB objects, I/O and built in functions, loop

structures, decision structures and array manipulation. (Prerequisites: CIS1415 and CIS1519, or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS1946 CISCO Networking I 3 credits (F)

This course is the first in a series of four courses that deal with the CISCO core content. This course prepares the student to take the CCNA or CISCO Certified Networking Associate exam. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1947 CISCO Networking II 3 credits (F)

This course is the second in a series of four courses that deal with the CISCO core content. This course prepares the student to take the CCNA or CISCO Certified Networking Associate exam. (Prerequisites: CIS1946) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1948 CISCO Networking III 3 credits (S)

This course is the third in a series of four courses that deal with the CISCO core content. This course prepares the student to take the CCNA or CISCO Certified Networking Associate exam. (Prerequisites: CIS1947) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS1949 CISCO Networking IV 3 credits (S)

This course is the fourth in a series of four courses that deal with the CISCO core content. This course prepares the student to take the CCNA or CISCO Certified Networking Associate exam. (Prerequisites: CIS1948) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS2510 Help Desk Methods 2 credits (I)

This is the first course of a two-course set. This course is designed to put the students' knowledge of microcomputers into practice using problem simulations. It includes: the role of the Help Desk, the components of a successful Help Desk, responsibilities associated with each call for help, skills required to be a successful Help Desk service provider. (Prerequisites: All the hardware and software courses assigned the first two semesters) (2 hrs lec/0 hrs lab/0 hrs OJT)

CIS2515 Help Desk Lab 2 credits (I)

This course is the second of a two-course sequence designed to provide students with real-world microcomputer problems. Students will answer help calls, document caller's request, analyze problems, fix the problems, and/or find the appropriate resources to satisfy caller's request. (Prerequisites: CIS2510) (0 hrs lec/4 hrs lab/0 hrs OJT)

CIS2530 Web Application Development 3 credits (S)

This capstone course introduces the concepts, vocabulary, and procedures associated with the use of Web site building and integration software. We will use commercial site building software to implement and maintain sites developed for the course. (Prerequisites: CIS1406, CIS1410, CIS1412) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS2540 Management Information Systems Applications 4 credits (I)

This course is a capstone course designed to help the student understand and apply the concepts learned in the program. They will develop applications to solve business problems in both the PC and mainframe environment. (Prerequisites: CIS 2740 and CIS 2742 or equivalent work experience and instructor approval.) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS2621 Advanced C++ Programming Language 4 credits (I)

This course builds on the introductory concepts used in Introduction to C++ Language. Students will work with advanced concepts using functions, classes and objects, array manipulation, and file access methods. (Prerequisites: CIS1621) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS2635 Java Programming Language 4 Credits (I)

This course teaches the use of programming languages used on the Internet to solve problems with a computer. Exposure to JAVA programming will be emphasized. Topics covered will include classes, objects, I/O and built in functions, loop structures, decision structures and array manipulation. (Prerequisites: CIS1415 or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS2641 Advanced COBOL 4 credits (S)

This course concludes the course sequence in COBOL. Topics include sequential file processing, the COBOL sort techniques, data editing techniques, updating sequential disk files, updating indexed and relative disk files, interactive displays, interactive menus, display files, display color, and line graphics. (Prerequisites: CIS1640) (3 hrs lec/2hrs lab/0 hrs OJT)

CIS2651 Advanced Visual Basic 4 credits (I)

This course concludes the course sequence in Visual Basic. Topics include using objects with SQL, common and custom controls, multi-document applications, programming with class modules, and program distribution. (Prerequisites: CIS1650) (3 hrs lec/2hrs lab/0 hrs OJT)

CIS2730 Database Management 4 credits (S)

Students will learn about database management terms, definitions and tools. They will also learn to use logical modeling techniques to create a database from the ground up. (Prerequisites: CIS1415, CIS1510) (3 hrs lec/2hrs lab/0 hrs OJT)

CIS2740 Systems Analysis and Design 4 credits (S)

This course provides a survey of procedures followed in the development of business computer information systems. Topics include structured approaches to needs assessment, specifications, and implementation of new systems. A project will be required in this class. (Prerequisites: One 2600 level courses in programming language.) (3 hrs lec/2 hrs lab/0 hrs OJT)

CIS2742 Applications Programming 2 credits (S)

Students will develop application programs from scenarios presented by the instructor or gathered by the student. The applications will be either written in a Web-based, PC-based language, or a combination thereof. (Prerequisites: CIS1415 and any 1600 level programming language) (1 hr lec/2 hrs lab/0 hrs OJT)

CIS2745 Network Administration: UNIX 3 credits (F/S)

An introduction to the increasingly popular UNIX operating system using free Linux. Students will understand the architecture of UNIX (file system, processes and device management), learn how to use common UNIX application and utility programs, program in scripting languages, and learn basic UNIX systems and network administration methods and techniques. (Prerequisites: CIS1519 or CIS1521 or instructor's consent) (2 hrs lec/2hrs lab/0 hrs OJT)

CIS2810 Networking Administration: Security 3 credits

This course introduces students to fundamental concepts and methods in data and network security, and prepares them to take industry certification examinations. (Prerequisites: CIS 1946 and 1947 or instructor consent)

CIS2845 Network Administration: Advanced UNIX 3 credits (F)

Topics will include advanced UNIX server administration skills: system installation and configuration; user services and process management; web and ftp server administration; network printing, and file server administration, managing gateway services and security. (Prerequisites: CIS2745) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS2950 Network Administration: Windows Client 3 credits (S)

This course is intended to help students learn how to plan, implement, manage, and support the latest Microsoft Windows Client operating system and prepare for the associated Microsoft Certified Professional examination. (Prerequisites: CIS 1401, CIS 1521, or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS2952 Network Administration: Windows Server 4 credits (F)

This course is designed to help students learn how to plan, implement, manage, and support the latest Microsoft Windows Server operating system and prepare for the associated Microsoft Certified Professional examination. (Prerequisites: CIS 2950 or instructor's consent) (2 hrs lec/4 hrs lab/0 hrs OJT)

CIS2954 Network Administration: Windows Network Infrastructure 3 credits (I)

This course is intended for new-to-product support professionals who will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows Server and networking technologies such as routing, DHCP, DNS, WINS, IPSEC, and certificate services. (Prerequisites: CIS2952, or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

CIS2963 Network Administration: Microsoft IAS 3 credits (I)

This course provides students with the knowledge and skills necessary to plan and implement Microsoft Internet Acceleration and Authentication Server. (Prerequisites: CIS 2954) (2 hrs lec/2 hrs lab/2 hrs OJT)

CIS2980 Internship 1-4 credits (F/S)

Internships vary from one to four credits per semester. The internship experience is very important to the student in order to gain working knowledge of the career they intend to pursue. One credit is equal to 48 hours of working experience. (Prerequisites: Permission of the department and required second-year courses.) (0 hrs lec/0 hrs lab/1-4 hrs OJT)

CIS2987 Professional Networking Capstone 3 credits (I)

This course is designed as a "capstone" for the Professional Computer Networking Program. It provides students with the opportunity to apply the full range of technical and communication skills they have developed throughout the program. In this course students will work under the guid-

ance of faculty to design, implement and document one or more complete hardware and software solutions for a typical set of business and/or scientific computing requirements. (Prerequisites: CIS1949, CIS2953, and CIS2845 (must have completed all three courses); or instructor permission.) (0 hrs lec/6 hrs lab/2 hrs OJT)

CIS2999 Special Topics in Computer Science
1-3 credits (I)
 Study of special topics in computer science. Special course topics will be announced in the class schedule.

Speech Communication

COMM1100 Fundamentals of Human Communication
3 credits (F/S)
 This course is designed to provide students with a body of concepts and principles for examining and understanding their communicative experiences, to influence their values and attitudes toward cooperative human relationships. Students will develop specific skills as speakers and listeners in interpersonal, small group, and public speaking settings. MTC goal areas: (1) Communication and (2) Critical Thinking. (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1105 Interpersonal Communication
3 credits (F/S)
 This course provides opportunities for students to understand the process of human communication, to assess their strengths and weaknesses as communicators, and to assist them in solving problems of an interpersonal nature, and develop interaction skills for interpersonal settings. MTC goal areas: (1) Communication and (2) Critical Thinking. (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1110 Methods of Public Speaking
3 credits (F/S)
 This course provides opportunities for students to become familiar with a variety of techniques to develop skills in research, organization, and presentation of informative and persuasive speeches. Students should expect to reduce speech apprehension and develop self-confidence in their ability to communicate in public. MTC goal areas: (1) Communication and (2) Critical Thinking. (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1115 Intercultural Communication
3 credits (F/S)
 This course allows the student an opportunity to study the process of communicating across cultures. Major ethnic cultures, as well as significant co-cultures, will become the focus of study. The course will provide experiential as well as cognitive learning. MTC goal areas: (1) Communication, (2) Critical Thinking, and (7) Human Diversity. (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1120 Media, Persuasion, and Society
3 credits (F/S)
 This course analyzes the various media of mass communication and the manipulative influence of this media on American society. Examples drawn from campaigns, commercial advertising, and editorials. Also included will be an introduction to the history and development of mass

communication systems such as magazines, newspapers, books, recorded music, television, radio and movies. MTC goal areas: (2) Critical Thinking, (5) History, and (8) Global Perspective. (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1125 Small Group Communication
3 credits (S)
 The theory and application of small group communication principles will be studied, practiced, and analyzed through self-directed work group projects. Group projects may be simulations or issues gained from within the college, business, or residential community. The goal is to improve individual and group interaction and to analyze the developments evident in this process. MTC goal areas: (5) Social/Behavioral Science, (7) Human Diversity (Prerequisites: and math, COMM/SPCH1105 or COMM/SPCH1100) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1600 Human Relations in Organizations
3 credits (F/S)
 An application course in human relations that concentrates on self-awareness, personal interactions, and relationships in careers or classrooms. Focus will be placed upon understanding personal behavior and communication in a variety of settings, (e.g. classrooms, careers). Understanding diversity among cultures, team building, ethics, group dynamics and personal responsibility will also be examined. Job-seeking, resumes, and interviewing will also be covered. MTC goal areas: (2) Critical Thinking, (5) History/Social and Behavioral Sciences, and (7) Human Diversity (Prerequisites:) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM1601 Human Relations – The Individual in Career or Classroom
1 Credit (F/S)
 An applications course in human relations and the job seeking process. Students will explore self-confidence and self-motivation, understanding employer and school expectations, identify personal and job-related skills. Job-seeking, resume-writing and interview skill-building will be covered. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

COMM1602 Human Relations – Team-building in Career or Classroom
1 Credit (F/S)
 An applications course in human relations that concentrates on self-awareness, personal interactions, and relationships in careers or classrooms. Focus will be placed upon understanding personal behavior and communication in a variety of settings, (e.g. classrooms, careers). (Prerequisites:) (1 hrs lec/0 hrs lab/0 hrs OJT)

COMM1603 Human Relations – Exploring Diversity in Career or Classroom
1 Credit (F/S)
 An applications course in human relations that concentrates on self-awareness, personal interactions, and the changing nature of organizations and classrooms in light of global diversity. Understanding diversity among cultures, team building, ethics, group dynamics and personal responsibility will also be examined. (Prerequisites:) (1 hrs lec/0 hrs lab/0 hrs OJT)

Term Course Codes:
 (F) = Fall Semester
 (S) = Spring Semester
 (F/S) = Fall & Spring Semesters
 (I) = Intermittent
 (Arr) = Arranged

COMM2000 Nonverbal Communication 3 credits (F)
 Emphasis on concepts and application of nonverbal communication will be studied to increase student awareness and understanding of the complexities involved in interpreting the relationship between verbal and nonverbal communication from personal, gender, and cultural perspectives. MTC goal areas: (2) Critical Thinking (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT).

COMM2205 Relationship Communication 3 credits (I)
 Covers advanced topics in interpersonal communication concerning communication in close (romantic/family) relationships. Topics for this course will include historical perspective of relationship development, theories of relationship issues, (conflict/maintenance/termination) as well as examining the influence of gender, ethnicity and nationality on the process of relationship communication. (Prerequisites: COMM 1110 or COMM 1105) (3 hrs lec/0 hrs lab/0 hrs OJT)

COMM2999 Special Topics in Communication 1-3 credits (I)
 Study of special topics in communication. Special course topics will be announced in the class schedule.

Dental Hygiene

DENH1401 Dental Anatomy 2 credits (F)
 This lecture and laboratory course is designed to familiarize the dental hygiene student with the development, anatomical components, functions, and supporting structures of the teeth. Soft tissue landmarks of the oral cavity, dental terminology and occlusion are included. Personal property fee required. (Prerequisites: All general education pre-technical requirements completed with a "C" or better and an overall G.P.A. of 2.4 or better and admission to the dental hygiene program) (1.5 hr lec/1 hr lab/0 hrs OJT)

DENH1405 Developmental Head and Neck Anatomy 2 credits (F)
 This course studies the anatomy of the head and neck with particular emphasis on the histology and development of the masticatory system. (Prerequisites: All general education pre-technical requirements completed with a "C" or better, and an overall G.P.A. of 2.4 or better, admission to the dental hygiene program) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH1420 Dental Hygiene Theory and Practice I 5 credits (F)
 This course covers introduction to dental hygiene with emphasis on the theory and practice of preventive dentistry, the use of preventive dental aids, basic clinical theory and function and entry-level instrumentation. Personal property fee required. (Prerequisites: All general education pre-technical requirements completed with a "C" or better, and an overall G.P.A. of 2.4 or better, admission to the dental hygiene program) (2 hrs lec/6 hrs lab/0 hrs OJT)

DENH1505 General and Oral Pathology 2 credits (S)
 This course covers the study of general disease processes. Special emphasis is placed on the study of the immune system and on the clinical and radiographic recognition of pathology of the oral cavity. (Prerequisites: Completion of all previous semester courses) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH1511 Dental Materials 4 credits (S)
 This course introduces students to preventive, diagnostic and restorative materials used in modern dentistry, including: chemical/physical composition, properties, appropriate uses, safe handling, and proper manipulation of materials. Students participate through hands-on learning projects. Personal property fee required. (Prerequisites: Completion of all previous semester courses) (2 hrs lec/4 hrs lab/0 hrs OJT)

DENH1520 Dental Hygiene Theory II 2 credits (S)
 This course is designed to continue the student's education in basic dental hygiene instrumentation and theory with an emphasis on dental health education, primary preventive measures, medical/dental emergencies, and treatment of medically compromised patients. This course will introduce the student to the procedures necessary for comprehensive patient treatment. (Prerequisites: Completion of all previous semester courses and concurrent registration with DENH1528) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH1528 Dental Hygiene Practice II 4 credits (S)
 This course is a supervised laboratory/clinical experience that provides the students with the opportunity to practice clinical procedures toward comprehensive patient treatment to include: evaluation of medical/dental histories, clinical charting procedures, dental hygiene instrumentation, fluoride therapy, radiographic survey as prescribed and expanded functions. Personal property fee required. (Prerequisites: Completion of all previous semester courses and concurrent registration with DENH1520) (0 hrs lec/8 hrs lab/0 hrs OJT)

DENH1530 Dental Radiology 3 credits (S)
 This course is designed to prepare the dental hygiene student in the art and science of producing intraoral radiographic surveys under simulated and actual clinical conditions. Course content includes theoretical concepts of the characteristics of radiation, effects of radiation exposure, dental radiographic anatomy, radiation protection, film processing, risk management and quality assurance programs. (Prerequisites: Completion of all previous semester courses) (2 hrs lec/2 hrs lab/0 hrs OJT)

DENH1560 Periodontology I 1 credit (S)
 This course covers discussion of the histology, pathogenesis, diagnosis, epidemiology and treatment of periodontal disease. Emphasis includes the progression of periodontal disease, diagnostic methods, treatment modalities, and the role of the dental hygienist in the prevention and treatment of periodontal disease. (Prerequisites: Completion of all previous semester courses) (1 hr lec/0 hrs lab/0 hrs OJT)

DENH2401 Pharmacology for the Dental Hygienist 2 credits (F)
 This course covers a survey of drug groups with special emphasis on drugs used in dentistry. Course content will include the following: physical and chemical properties of

College Level Reading = 
College Level Writing = 

the drugs, routes of administration, therapeutic and adverse effects, drug interactions, dental local anesthesia and nitrous oxide sedation. Identifying and managing clinical emergencies related to pharmacological agents and dental local anesthesia is also included. (Prerequisites: Completion of all previous semester courses) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH2420 Dental Hygiene Theory III 2 credits (F)
This course is designed to be a continuation of Dental Hygiene Theory II (DENH1520) with emphasis on advanced dental hygiene skills and patient relations. The curriculum is planned to provide students with knowledge about chemotherapeutic agents, various indices, nutritional counseling, advanced ultrasonic instrumentation techniques, margination, and management of patients with special needs. (Prerequisites: Completion of all previous semester courses and must be taken concurrently with DENH2428) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH2428 Dental Hygiene Practice III 6 credits (F)
This course is a continuation of Dental Hygiene Practice II (DENH1528) with supervised clinical experiences which includes an introduction to periodontal therapy and expanded functions. Radiographic interpretation is incorporated into the clinical experiences. Personal property fee required. (Prerequisites: Completion of all previous semester courses and concurrent registration with DENH2420) (0 hrs lec/12 hrs lab/0 hrs OJT)

DENH2431 Radiographic Interpretation 2 credits (F)
This course is an advanced study of the principles of radiographic interpretation which recognizes the limitations and benefits of dental radiography in evaluating periodontal disease, dental caries, developmental abnormalities and pathological conditions. Course content also includes: extraoral radiography, localization techniques, and identification of dental materials and foreign objects. (Prerequisites: Completion of all previous semester courses) (1 hrs lec/2 hrs lab/0 hrs OJT)

DENH2460 Periodontology II 2 credits (F)
Through lecture series and a field experience, this course is designed to expand the knowledge of the dental hygiene student in the field of periodontology. The curriculum is planned to provide students with knowledge about systemic complications, periodontal emergencies, nonsurgical and surgical periodontal techniques, supportive periodontal therapy and various chemotherapeutic agents utilized in periodontal treatment. Legal and ethical aspects of the dental hygienist's role in periodontal therapy will also be covered. (Prerequisites: Completion of all previous semester courses) (2 hrs lec/0 hrs lab/0 hrs OJT)

DENH2501 Pain Management 1 credit (S)
This course is designed to prepare students with the skills needed to develop competencies in the safe and effective administration of pain control techniques used in dentistry. (Prerequisites: Completion of all previous semester courses) (.5 hr lec/1 hr lab/0 hrs OJT)

DENH2503 Dental Hygiene Seminar 1 credit (S)
This course covers the development and presentation of a case study; completion of a Dental Hygiene Program Portfolio; ethical, legal and regulatory concepts to the provision and/or support of oral health care services; career

placement; and preparation for national, regional and state boards. (Prerequisites: completion of all previous semester courses) (1 hr lec/0 hrs lab/0 hrs OJT)

DENH2520 Dental Hygiene Theory IV 1 credit (S)
This course is designed to be a continuation of Dental Hygiene Theory III (DENH 2420) with emphasis on advanced dental hygiene skills and patient relations. The curriculum is planned to provide students with knowledge about treatment modalities, practice management, management of patients with special needs, professionalism, product evaluation, jurisprudence, and new technologies in dentistry. (Prerequisites: Completion of all previous semester courses and must be taken concurrently with DENH2528) (1 hr lec/0 hrs lab/0 hrs OJT)

DENH2528 Practice IV 6 credits (S)
This course is a continuation of Dental Hygiene Practice III (DENH2428) with supervised clinical experiences. Advanced enhancement of radiographic skills and interpretation, periodontal therapy and expanded functions are included. Personal property fee required. (Prerequisites: Completion of all previous semester courses and concurrent registration with DENH2520) (0 hrs lec/12 hrs lab/0 hrs OJT)

DENH2550 Community Dental Health 2 credits (S)
This course introduces students to the disciplines and principles of dental public health, epidemiologic methods, and biostatistical measurement and analysis. Review of preventive dentistry, dental health education, and program development are included. Field experiences provide the students an opportunity to conduct dental health programs in the community. (Prerequisites: Completion of all previous semester courses) (1.5 hrs lec/1 hrs lab/0 hrs OJT)

DENH2590 Dental Hygiene National Board Review 1 credit (S)
This elective lecture course is a prepared review by the instructor on the assigned topic intended to be a supplement to the student's preparation to taking the Dental Hygiene National Boards. (Prerequisites: Completion of all previous semester courses) (1 hr lec/0 hrs lab/0 hrs OJT)

DENH2600 Clinical Remediation 1 credit (Arr)
This course focuses on areas of clinical deficiencies and utilizes supervised clinical practice to develop competence. (Prerequisites: Recommendation and instructor's consent. Must be a student in the Lake Superior College Dental Hygiene Program or a recent graduate [within one year]) (0 hrs lec/2 hrs lab/0 hrs OJT)

DENH2999 Special Topics in Dental Hygiene 1-3 credits (I)
Study of special topics in dental hygiene. Special course topics will be announced in the class schedule.

Economics

ECON1100 Introduction to Economics 3 credits (F/S)
This course covers a general description of the United States economy. Provides an overview of basic micro- and macroeconomic concepts, focusing on major economic issues and problems of the day. MTC goal areas: (5) History and the Social and Behavioral Sciences and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ECON1150 Principles of Economics: Macroeconomics 3 credits (F/S)

A study of the macroeconomy-inflation, unemployment, economic growth, productivity, and international trade. A study of money and the banking sector. MTC goal areas: (5) History and the Social and Behavioral Sciences and (8) Global Perspectives. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ECON1160 Principles of Economics: Microeconomics 3 credits (F/S)

This course studies the individual units of our economic system, including: demand and supply, utility, production and cost, and other applications of microeconomics. MTC goal area: (5) History and the Social and Behavioral Sciences. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ECON2020 Statistics for Business and Economics I 3 credits (I)

Statistical analysis of business and economic data emphasizing problem solving and computer-based methods. Topics covered include: descriptive statistics, probability, probability distributions, sampling, estimation, hypothesis testing, and index numbers. (Prerequisite: MATH0470) (3 hrs lec/0 hrs lab/0 hrs OJT)

ECON2022 Statistics for Business and Economics II 3 credits (I)

Statistical analysis of business and economic data emphasizing problem solving and computer-based methods. Topics covered include: survey and experimental design, analysis of variance, regression and correlation, qualitative data analysis, and time series analysis. (Prerequisite: ECON2020)

ECON2999 Special Topics in Economics 1-3 credits (I)
Study of special topics in economics. Special course topics will be announced in the class schedule.

Education

EDUC2000 Introduction to Teaching 3 credits (S)
Introduction to schooling, teaching, and the foundations of education. The major purpose is to help students clarify their thoughts and feelings about becoming a teacher. Topics include teachers, students, schools, teaching, school finance, history of U.S. education, philosophy of education. Must be taken concurrently with SOC2779, Community Service Collaboration (field experience.) (Prerequisites:   Co-requisites: SOC2779, Community Service Collaboration) (3 hrs lec/0 hrs lab/0 hrs OJT)

Commercial and Residential Wiring

ELEC2401 Residential Wiring 2 credits (F)
This course covers the requirements for electrical branch and general circuits in residences. Topics include the calculation of electrical cable sizes and types, calculations for service-entrance equipment, ground-fault circuit interrupters, safe work practices, estimating, and blueprint reading. (Prerequisites: Completion of first year courses, or consent of instructor.) (2 hrs lec/0 hrs lab/0 hrs OJT).

ELEC2402 Residential Wiring Lab 2 credits (F)
This course covers the practical applications of the requirements for electrical branch and general circuits in residences. Topics include the techniques for installation of electrical cables, special and general outlets, calculations for service-entrance equipment, ground-fault circuit interrupters, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELEC 2405 Electrical Blueprint Reading 2 credits (F/S)

This course covers the basics on reading and interpreting various architectural drawings for the electrical industry in residential, commercial, and industrial construction. (Prerequisites: Completion of first year courses or consent of instructor.) (2 hrs lec/0 hrs lab/0 hrs OJT).

ELEC2421 Commercial Wiring I 2 credits (F)

This course covers the requirements for the calculation and installation of transformers, raceways, conduits, junction boxes, elevators, service entrances, subpanels, and various types of lighting found in commercial properties. (Prerequisites: Completion of first year courses or consent of instructor.) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2422 Commercial Wiring I Lab 2 credits (F)

This course covers the installation of transformers, raceways, conduits, junction boxes, elevators, service entrances, subpanels and various types of lighting found in commercial properties. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELEC2431 Motor Control 2 credits (F)

This course covers the theoretical and application of controls for electrical systems. Topics will include the control of various types of lighting, motors, and other electrical equipment, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2432 Motor Control Lab 1 credits (F)

This course covers the theoretical and application of controls for electrical systems. Topics will include the control of various type of lighting, motors, and other electrical equipment, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

ELEC2440 National Electrical Code I 2 credits (F)

This course covers the history and application of the National Electrical Code towards residential and commercial properties and business. It is designed to support the third semester curriculum of the Commercial and Residential Wiring program. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2451 Commercial Wiring II 2 credits (S)

This course continues on from the Commercial Wiring I course in the third semester. Topics included are theoretical aspects for lighting, motors, and other electrical equipment. Also covered are safe work practices and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2452 Commercial Wiring II Lab 2 credits (S)
 This course continues on from the Commercial Wiring I course in the third semester. Topics included are installation practices for lighting, motors, and other electrical equipment. Also covered are safe work practices and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELEC2461 Electrical Troubleshooting 2 credits (S)
 This course covers the practical approach to troubleshooting electrical systems. Topics will include the common problems with various types of lighting, motors, controls, and other electrical equipment, safe work practices and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2471 Industrial Wiring 2 credits (S)
 This course covers the theoretical application of industrial wiring methods and materials for electrical systems. Topics will include hazardous locations, lighting, motor selections, other electrical equipment pertaining to industrial settings, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2472 Industrial Wiring Lab 2 credits (S)
 This course covers the theoretical and practical application of industrial wiring methods and materials for electrical systems. Topics will include hazardous locations, lighting, motor selections, other electrical equipment pertaining to industrial settings, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELEC2490 Electrical Internship 1-4 credits (F/S)
 This course provides the student with work site experience where skills and knowledge learned in previous courses may be applied. The internship experience includes safety procedures, quality control systems, personnel procedures, company organization, contractual agreements, and other employer expectations. The students can register for varying credits based on their planner and the number of hours of work available from the employer. One credit is equivalent to 48 hours of work time. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/3-12 hrs OJT)

ELEC2501 Electric Controls 2 credits (S)
 This course covers the theoretical application of controls for electrical systems. Topics will include the control of various types of lighting, motors, and other electrical equipment, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2502 Electric Controls Lab 1 credit (S)
 This course covers the theoretical application of controls for electrical systems. Topics will include the control of various types of electrical equipment, lighting, commercial and industrial processes, safe work practices, and blueprint reading. (Prerequisites: Completion of the first year courses or instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

ELEC2510 National Electrical Code II 2 credits (S)
 This course covers the history and application of the National Electrical Code towards commercial and industri-

al properties and business. It is designed to support the fourth semester curriculum of the Commercial and Residential Wiring program. (Prerequisites: Completion of the first year courses or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELEC2511 Introduction to the National Electrical Code 1 credit (Arr)
 This course covers the history and application of the National Electrical Code towards residential, commercial and industrial properties, and business. It is designed to give working knowledge of the National Electrical Code to students with little background in the electrical field. (Prerequisites: Instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

ELEC2520 Blueprint Reading for Electricians 1 credit (Arr)
 This course covers the construction and design of residential, commercial, and industrial buildings. Topics include different types of plans, symbols, specifications, and the requirements for installing electrical cables, special, and general outlets, based on the National Electrical Code. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ELEC2999 Special Topics in Commercial and Residential Wiring 1-3 credits (I)
 Study of special topics in commercial and residential wiring. Special course topics will be announced in the class schedule.

Electronic Engineering Technology

ELTN1400 Basic Electricity Theory 5 credits (F/S)
 This course covers essential entry-level topics in DC and AC circuits, electronic devices, and associated applications of algebra and trigonometry. (Prerequisites: None) (5 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1405 Basic Electricity Lab 3 credits (F/S)
 In conjunction with Basic Electricity Theory, the objective of this course is to learn how to use electronic test equipment to test components and measure circuit values to determine performance. In doing so, the student will verify the laws and theorems presented in the lectures. (Prerequisites: Concurrent enrollment in ELTN 1400) (0 hrs lec/6 hrs lab/0 hrs OJT)

ELTN1410 Digital Basics 1 credits (F/S)
 Basic logic gates and number systems are studied along with Boolean and Karnaugh mapping techniques. Digital circuit troubleshooting prepares the person for micro-processor courses and/or troubleshooting and repair of PC's and networking hardware. (Prerequisites: None) (1 hrs lec/0 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
 (S) = Spring Semester
 (F/S) = Fall & Spring Semesters
 (I) = Intermittent
 (Arr) = Arranged

ELTN1411 Introduction to Digital Electronics 1 credit (F)

Digital Basics is a single unit course covering basic digital gates and TTL logic. Lab experiments show the student the physical characteristics and operation of basic gates in the performance of basic circuits. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ELTN1415 Digital Lab 1 credits(F/S)

Digital Basics is a single unit course covering basic digital gates and TTL logic. Lab experiments show the student the physical characteristics and operation of basic gates in the performance of basic circuits. (Prerequisites: Concurrent enrollment in ELTN1410) (0 hrs lec/2 hrs lab/0 hrs OJT)

ELTN1420 Soldering and Surface Mount Lab 1 credit (F/S)

This course covers soldering, desoldering, repair of printed circuit boards with discreet and surface mount components, and electrostatic precautions. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

ELTN1430 Solid-State Theory 3 credits (S)

This course covers the basic topics of solid-state devices used in power supplies, amplifiers, switching circuits, and integrated circuit timers, including their purposes and characteristics. (Prerequisites: ELTN1400 and ELTN1405) (3 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1431 Introduction to Solid-State 2 credits (S)

This course covers the essential topics on solid-state devices used in power supplies bipolar transistor amplifiers, and solid-state switching circuits. (Prerequisites: ELTN1400 and ELTN1405) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1435 Solid-State Lab 2 credits (S)

This course covers the essential basic topics of solid-state devices, applications in amplifiers, power supplies, solid-state switching circuits, and integrated-circuit timers. This involves predicting circuit values and verifying those values using various measurements. (Prerequisites: Concurrent enrollment in ELTN1430) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELTN1436 Introduction to Solid-State Lab 1 credit (S)

This course employs the use of experiments to verify the principles and information presented in the lecture portion, ELTN1431, which should be taken concurrently. (Prerequisites: ELTN1400 and ELTN1405) (0 hrs lec/2 hrs lab/0 hrs OJT)

ELTN1440 AC/DC Rotating Equipment 4 credits (S)

This course covers single phase motors and basic control, DC motors and generators and basic control, and three phase motors and systems which include alternators, transformers and loads. (Prerequisites: ELTN1400 and ELTN1405) (4 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1445 AC/DC Rotating Equipment Lab 4 credits (S)

This course covers single phase motors and basic control, DC motors and generators and basic control, and three phase motors and systems which include alternators, trans-

formers and loads. (Prerequisites: Concurrent enrollment in ELTN 1440) (0 hrs lec/8 hrs lab/0 hrs OJT)

ELTN1450 Microcontroller Theory 4 credits (S)

Microcontroller Theory covers the practical aspects of how a microcontroller, specifically a Microchip PIC, can be programmed and used as an embedded control device. In doing so the student learns the basic internal architecture of a PIC microcontroller, as well as a PIC's instruction set and how to interface it with various external input and output devices. The student will also learn to use Microchip MPLab software development tools to write assembly language code, assemble it, and download it into onchip memory, enabling the microcontroller to function independently as an embedded controller. (Prerequisites: Concurrent enrollment in ELTN1430 or instructor's consent.) (4 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1455 Microcontroller Lab 2 credits (S)

Lab exercises are performed on a student development system. Software is written and assembled using the MPLab development tools and downloaded into a PIC Microcontroller by way of a PIC Start Plus programming module. Interfacing is performed using a protoboard, a PIC Microcontroller, and various peripheral devices. (Prerequisites: Concurrent enrollment in ELTN1450) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELTN1460 Programmable Controllers 2 credits(F/S)

This course covers the fundamentals, programming, and troubleshooting of Programmable Controllers. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN1470 Systematic Troubleshooting 1 credit (F)

This course provides the student with a systematic, rational approach to analyze problems and avoid future problems. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

ELTN1500 Practical PC Maintenance 3 credits(F/S)

The students will learn to use various common office applications and an internet browser. They will also learn to install and use several operating systems and to install and configure various computer hardware components. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

ELTN1600 Basic Telecommunications Theory 2 credits

Course content includes basic telecommunication topics including: antennas, RF, telephone, modulation, wireless and related technology systems that require a low voltage, qualified technician to install. Additional class discussion will address current techniques and future trends for the control of a premise. (Prerequisites: Current registration in ELTN 1400 and ELTN 1410) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1610 System Planning/Blueprint/CAD 2 credits

General procedures and steps involved in the site survey in order to establish and confirm the installed locations of new and/or existing sensors/equipment and related routing of cabling and raceways will be covered. Drawing and layout software will be covered. Documentation and presentation techniques will be covered and assigned. (Prerequisites: Semester 1 of the Power Limited Certificate or instructor consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN1620 NEC/Conduit/Pathways 2 credits
The NEC code will be addressed for procedures and steps involved in the system layout in order to establish and confirm the installation methods of new and/or existing sensors/equipment and related routing of cabling and raceways. Methods of blocking airflow between airspaces - firestopping will be discussed. Types of conduit and raceways used in managing the many types and sizes of cable and media and tie in with the system plan will be addressed. Wireless media and basic telecommunications terms and definitions will be covered. (Prerequisites: Semester 1 of the Power Limited Certificate or instructor consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1625 NEC/Conduit/Pathways Lab 3 credits
In conjunction with the NEC/Conduit/Pathways the lab will install a structured media center, cable trays, under floor raceways, surface metal and nonmetallic raceways and associated mounting devices using system layout blueprints. The NEC code will be applied. Firestopping of airspaces will be implemented as appropriate. (Prerequisites: Semester 1 of the Power Limited Certificate or instructor consent) (0 hrs lec/6 hrs lab/0 hrs OJT)

ELTN1630 PLT Control Systems 3 credits
This course covers sensor and module devices that when installed and activated will enhance the premise environment. These devices will provide for control and monitoring of temperature, water/humidity, electrical/surges, lighting, motion detection (security), sound, video and fire. A further course objective is to cover software/hardware integration. The premise will be defined in terms of a system layout. Devices and loads will be added; addressing and component assignments will be added to the system layout. Device programming sequences will be set up for both manual and automatic control. (Prerequisites: Semester 1 Power Limited Certificate or instructor consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ELTN1635 PLT Control Systems Lab 3 credits
In conjunction with the PLT Control Systems course, the objective of the lab is to focus on proper device terminations, input/output states of the device and the appropriate interface to set an alarm or initiate a remedy within the premise. (Prerequisites: Semester 1 of the Power Limited Certificate or instructor consent.) (0 hrs lec/6 hrs lab/0 hrs OJT)

ELTN 1640 PLT Networking and Support 2 credits
The course objective is to network all of the systems into a controlled environment. Systems will be built from the main equipment room using a structured media center (SMC) and expand out to zones throughout the premise. Vendor software, control touch pads and PC will be implemented. (Prerequisites: Semester 1 of the Power Limited Certificate or instructor consent.) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN2400 CET Exam Preparation 1 credits (S)
This course prepares the student for the Certified Electronic Technician examination. This nationally recognized certification exam covers a wide range of electronic theory and applications. (Prerequisites: ELTN1430 or instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

ELTN2401 FCC Exam Preparation 1 credit (S)
This course prepares the student for the Federal Communications Commission (FCC) General

Radiotelephone Operators License examination. (Prerequisites: Concurrent enrollment in ELTN2480 or ELTN1600 or instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

ELTN2410 Media and Cabling Theory 1 credit (F)
Media and Cabling offers the student wiring strategies using copper wire and fiber optic cable. Category 5 copper will be implemented using the TIA 568A code. Fiber optic cabling will be learned along with splicing techniques as specified by 3M and AMP. Cable testing will be learned using a Fluke cable tester, following current industry standards. (Prerequisites: Concurrent enrollment in the Network Specialist, Digital Communication, or Commercial and Residential Wiring programs) (1 hr lec/0 hrs lab/0 hrs OJT)

ELTN2415 Media and Cabling Lab 2 credits(F/S)
Media and Cabling lab allows the student to perform wiring strategies using copper wire and fiber optic cable. Category 5 copper will be implemented using the TIA 568A code. Fiber optic cabling will be done as specified by 3M and AMP. Cable testing will be done, to code, using a Fluke cable tester and following current industry standards. (Prerequisites: Concurrent enrollment in the Network Specialist, Digital Communication, or Commercial and Residential Wiring programs) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELTN2420 Robotics 2 credits(Arr)
This course covers the basics of robotics and how robots are interfaced with microprocessor controllers and sensors. (Prerequisites: ELTN1410) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN2430 Introduction to Instrumentation 2 credits(Arr)
This course covers instrumentation concepts including theory of instrumentation loops, common symbols, acronyms, input/output devices, controllers, and troubleshooting. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELTN2440 Motor Speed Controllers 2 credits(Arr)
This course covers the basic methods of DC, AC, magnetic, and mechanical speed control. Installation and testing methods will be practiced. (Prerequisites: Instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN2450 Programmable Control Applications 2 credits(Arr)
This course covers the theory of operation, installation, programming, application, and troubleshooting of programmable logic controllers. (Prerequisites: ELTN1460) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN2465 A+ PC Service & Support 3 credits(F/S)
The course is designed to train students in the science of servicing computers. Students completing this training will be prepared to service PC's of different makes and models, in a host of working environments. Further, the course will prepare the student to take the A+ OS Technologies Exam. (Prerequisites: Concurrent enrollment in CIS1521) (0 hrs lec/6 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

ELTN2470 Video Theory 2 credits(Arr)
 Video theory is a course which focuses on the theory of trouble shooting the PC monitor as video hardware. Repair and understanding of video as implemented/communicated from the PC to the video monitor, offers the student more career choices in the area of networks and their hardware. (Prerequisites: ELTN1430 and ELTN1435) (2 hrs lec/0 hrs lab/0 hrs OJT)

ELTN2475 Video Lab 2 credits(Arr)
 Video lab is a course which focuses on the PC monitor as video hardware. Repair and understanding of video as implemented/communicated from the PC to the video monitor, offers the student more career choices in the area of networks and their hardware. (Prerequisites: ELTN1430 and ELTN1435) (0 hrs lec/4 hrs lab/0 hrs OJT)

ELTN2477 Electronics Internship 1-4 credits (Arr)
 This course provides the student with work-site experience in which skills and knowledge learned in previous courses may be applied. Technical skills and knowledge will include design, assembly, installation, operation, maintenance, and repair of machines and equipment as appropriate to the internship site. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/3-12 hrs OJT)

ELTN2480 Communications Electronics 5 credits (S)
 This course covers the essential topics underlying basic electronic communications theory. Topics covered include various analog and digital modulation schemes, basic antenna theory, EM wave propagation theory, transmission line and waveguide theory, and applications of these topics related to specific modern wireless communications systems. (Prerequisites: Concurrent enrollment in ELTN1430) (5 hrs lec/0 hrs lab/0 hrs OJT)

ELTN2485 Communications Electronics Lab 5 credits (S)
 This course employs the use of experiments to verify the principles presented in the lecture course, ELTN2480. The student also learns to use electronic equipment commonly used in the electronic communications industry. (Prerequisites: Concurrent enrollment in ELTN2480) (0 hrs lec/10 hrs lab/0 hrs OJT)

ELTN2500 Servomechanisms and Synchronos 2 credits(Arr)
 This course covers Synchronos, Servos, and Open and Closed loop control systems. (Prerequisites: ELTN1400 and ELTN1405) (1 hr lec/2 hrs lab/0 hrs OJT)

ELTN2505 Networking + Service and Support 3 credits (S)
 Data communication is a changing field. Networking electronics skills are obtained by the student with a hands-on approach: building a peer-to-peer network, then a client-server network. Along with an understanding of the OSI model, the student puts previous learning to use with building and testing the data links for fax/modem/LANS and NIC cards; cabling techniques/problems and instructor inserted faults, both of a software and hardware nature. (Prerequisites: ELTN2465) (1 hr lec/4 hr lab/0 hrs OJT)

ELTN2515 COMPTIA A+ Certification Exam Prep 1 credit (F/S)
 This course will prepare the student to take the COMPTIA A+ Certification core exam. (Prerequisites: ELTN2465) (1 hrs lec/0 hrs lab/0 hrs OJT)

ELTN2999 Special Topics in Electronic Engineering Technology 1-3 credits (I)
 Study of special topics in electronic engineering technology. Special course topics will be announced in the class schedule.

Paramedic

EMTP1120 Paramedicine I 3 Credits (F)
 At the completion of this course, the paramedicine student will understand the roles and responsibilities of a paramedic within an EMS system, apply the basic concepts of development, pathophysiology and pharmacology to assessment and management of emergency patients, and communicate effectively with patients. Additionally the paramedicine student will be able to take proper history and perform comprehensive physical exam on any patient, communicate the findings to others, integrate pathophysiological principles and assessment findings to formulate a field impression and understand how to implement the treatment plan for the trauma patient and safely manage the scene of an emergency. (Prerequisites: Current EMT-B license or certification and instructor approval) (3 hrs lec/0 hrs lab/0 hrs OJT)

EMTP1125 Emergency Vehicle Operations (EVOP) 1 Credit(Arr)
 This course will prepare the paramedic student to operate an emergency care vehicle within the rules established by the Minnesota Emergency Medical Services Regulatory Board. (Prerequisites: Current EMT-Basic certification) (1 hr lecture, 0 hrs lab/0 hrs OJT)

EMTP1220 Paramedicine Skills I 3 Credits (F)
 After completing this course the paramedic student will be able to apply the basic concepts of development, pathophysiology and pharmacology to assessment and management of emergency patients, be able to properly administer medications and communicate effectively with patients, be able to establish and/or maintain a patient airway, oxygenate, and ventilate a patient, be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the trauma patient, and communicate the findings to others, and will be able to safely manage the scene of an emergency. (Co-requisite: EMTP1120) (0 hrs lec/6 hrs lab/0 hrs OJT)

EMTP1225 Pharmacology 2 Credits (S)
 This course is an introduction to pharmacological interventions commonly used in the prehospital environment. It covers pharmacokinetics and pharmacodynamics of medications, administration routes, techniques and dosage calculations. Major categories of medications such as antiarrhythmics, analgesics, catecholamines, etc. will be introduced along with specific medications in each group. (Prerequisites: EMTP1120) (2 hrs lec/0 hrs lab/0 hrs OJT)

EMTP1300 Bioterrorism 2 Credits (Arr)

This course is designed to introduce the student to special pre-hospital environmental difficulties found in Northern Minnesota. This course will also discuss bioterrorism as it relates to nuclear, chemical and biological situations the paramedic may face in the field. (Prerequisites: Current EMT-Basic license/certification) (2 hrs lec/0 hrs lab/0 hrs OJT)

EMTP1420 Paramedicine II 3 Credits (S)

At the completion of this course, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with respiratory problems and/or cardiovascular disease. (Prerequisites: EMTP1120, EMTP1220; co-requisite: EMTP1520)

EMTP1520 Paramedicine Skills II 3 Credits (S)

Skills covered include the basic and advanced skills required to properly manage respiratory and cardiac patients in the pre-hospital environment. These skills include, but are not limited to, respiratory assessment, cardiac assessment, defibrillation, cardioversion, medication administration, cardiac rhythm interpretation and 12 lead monitoring. (Prerequisites: EMTP1120, EMTP1220. Co-requisite: EMTP1420) (0 hrs lec/6 hrs lab/0 hrs OJT)

EMTP1600 Critical Care Clinical 2 Credits (Arr)

This course covers clinical areas to include, but not limited to, medical, cardiac, and surgical intensive care units, emergency department, and telemetry. (Prerequisites: EMTP1420 and EMTP1520) (0 hrs lec/0 hrs lab/6 hrs OJT)

EMTP1700 Support Services Clinical 2 Credits (Arr)

This course covers clinical areas that may include, but are not limited to, intubation, IV therapy, first response, dispatch, and respiratory therapy. (Prerequisites: EMTP1420 and EMTP1520) (0 hrs lec/0 hrs lab/6 hrs OJT)

EMTP1800 ALS Ambulance Clinical 4 credits(Arr)

This course is designed to introduce the paramedic student to an Advanced Life Support ambulance service. The student will become familiar with the operations, procedures and care provided by the paramedic in the field. The student will be involved with BLS and ALS patient care and treatment provided under the supervision of a staff paramedic. (Prerequisites: EMTP1420 and EMTP1520) (0 hrs lec/0 hrs lab/12 hrs OJT)

EMTP2020 Paramedicine III 4 Credits (F)

At the completion of this course, the paramedic student will be able to integrate pathophysiological principles and assessment finding to formulate a field impression and implement the treatment plan for the patient with a neurological problem, endocrine problem, an allergic or anaphylactic reaction, a gastroenterologic problem, a renal or urologic problem, a toxic exposure, an environmentally induced or exacerbated medical or traumatic condition, with infectious and communicable diseases, with behavioral emergencies, experiencing a gynecological emergency, experiencing normal or abnormal labor. (Prerequisites: EMTP1600, EMTP1700, and EMTP1800) (4 hrs lec/0 hrs lab/0 hrs OJT)

EMTP2120 EMS Hazardous Materials 1 Credit (F)

This course covers hazardous materials scene management for EMS personnel. Topics include identifying hazardous materials, scene safety, scene management, decontamination and scene access among others. (Prerequisites: Current EMT-B licensure or certification) (1 hr lec/0 hrs lab/0 hrs OJT)

EMTP2220 Paramedicine IV 3 Credits (F)

This course will introduce the paramedic student into the operations and management of an Advanced Live Support ambulance service. It will additionally discuss certain types of rescue operations which will be necessary for successful patient outcomes in the pre-hospital environment. (Prerequisites: EMTP2020) (3 hr lec/0 hrs lab/0 hrs OJT)

EMTP2300 Advanced Cardiac Life Support Provider 1 Credit (F)

This course will result in the certification of Advanced Cardiac Life Support Provider from the American Heart Association. It covers all of the aspects of treating cardiac patients at the advanced level to include basic and advanced airway control, cardiac rhythm interpretation, medication administration, and post resuscitation management. (Prerequisites: Current CPR-Experienced Health Care Provider certification, current RN, paramedic, or paramedic, cardiovascular tech, or respiratory care student, and instructor's consent. 1 hr lec/0 hrs lab/0 hrs OJT)

EMTP2320 Advanced Trauma Life Support Provider 1 Credit (F)

This course will provide certification as an Advanced Trauma Life Support Provider. It will cover areas such as kinematics, various injury pathologies and mechanisms, and trauma patient management priorities. This class will utilize the national standard curriculum from either BTLs or PHTLS Advanced programs. The certification will be issued if all didactic and performance objectives are met. (Prerequisites: Current EMT-Intermediate, or EMTP1420 and EMTP1520) (1 hr lec/0 hrs lab/0 hrs OJT)

EMTP2340 Pediatric Advanced Life Support (PALS) 1 Credit (S)

This course follows the course standards of the American Heart Association for PALS. The course leads to certification as a PALS provider upon successful completion. (Prerequisites: Current CPR-Experienced Health Care Provider certification, RN, paramedic, respiratory care therapist, or current second year paramedic student, and approval of the instructor) (1 hr lec/0 hrs lab/0 hrs OJT)

EMTP2360 Neonatal Resuscitation Program (NALS) 1 Credit (S)

This course will result in the certification from the American Heart Association for NRP. The course leads to awarding of a certification upon successful completion of the class. (Prerequisites: Current CPR-Experienced Health Care Provider certification, RN, paramedic, respiratory care therapist, or current second year paramedic student, and approval of the instructor) (1 hr lec/0 hrs lab/0 hrs OJT)

EMTP2380 Advanced Medical Life Support Provider
1 Credit (S)

This course covers the national certification requirements for Advanced Medical Life Support. Successful completion of the course will result in the awarding of certification as an AMLS provider. This certification is provided by the National Association of Emergency Medical Technicians. (Prerequisites: Paramedic, RN, or current second year paramedic student and approval of instructor.) (1hr. lec/0 hrs lab/0 hrs OJT)

EMTP2400 Emergency Department Clinical
3 Credits (S)

This course covers the operations of the emergency department of an acute care hospital. The paramedic student utilizes all of the knowledge and skills learned to this point to provide patient care in this setting under the supervision of an RN and/or physician. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

EMTP2500 Acute Care Clinical 3 Credits (S)

This course includes clinical rotation through labor and delivery, pediatrics, and psychiatry. The paramedic student utilizes all the knowledge and skills learned to this point to provide patient care in these settings under the supervision of appropriate staff. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

EMTP2600 Paramedicine Internship 8 Credits (S)

This course covers the application of advanced level skills and knowledge in the evaluation and care of the pre-hospital patient. The paramedic student will be involved in providing patient care as a team member and as a team leader under the direct supervision of a staff paramedic along with all the typical "follow-up" procedures prior to and after a response. (Prerequisites: Instructor's consent) (0 hrs lec/0 hrs lab/8 hrs OJT)

English**ENGL0450 Fundamentals of Writing I** 3 credits(F/S)

The main purpose of the course is to develop students' skills in recognizing parts of sentences and to increase students' competencies in composing them. Special emphasis will be placed on eliminating sentence boundary errors (run-ons, comma splices, fragments). Regular writing assignments will emphasize skills in observation and inductive thinking. (Prerequisites: Appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL0460 Fundamentals of Writing II 3 credits(F/S)

This is a basic writing course which progresses from composition of expository paragraphs in several rhetorical modes to composition of expository essays. Rules of grammar and punctuation are reviewed. (Prerequisites: Appropriate placement test score or ENGL0450 and READ0450 with a grade of "C" or better) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1100 Creative Writing 3 credits (I)

This course is designed to stimulate creativity in thought and perception and to enhance each student's abilities to express his or her personal vision in written form.

Students will be introduced to the basic language, concepts, and structures of fiction, poetry, and journal writing. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1106 College Composition I 3 credits(F/S)

First semester college-level composition course focusing on writing expository prose using word processing as a tool for composing. Emphasis is on writing as a process, critical reading, developing a voice, and grammar review. Presupposes competency in standard English. Required of all students working toward an AA, AS, or AAS Degree, unless special exemption is granted. MTC goal areas: (1) Communication and (2) Critical Thinking. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1107 Professional and Technical Writing
3 credits(F/S)

This course is designed to strengthen skills in various areas of professional communications including business and technical writing in traditional formats, problem solving and analysis, oral communication and presentations. MTC goal area: (2) Critical Thinking. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1109 College Composition II 3 credits(F/S)

Second semester college-level composition course focusing on academic writing using primary and secondary sources, including basic research using print and electronic sources. Emphasis is on writing as a process, critical analysis, summarizing, research, logical argumentation, and MLA documentation. Presupposes competency in standard English. Required of all students working toward an AA or AS Degree, unless special exemption is granted. MTC goal areas: (1) Communication and (2) Critical Thinking. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1110 Literature of the American West
3 credits (I)

The study of a broad range of literature identified with westward expansion across the American continent. The course includes the classical Western novel as well as more recent literary developments. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1115 Introduction to Literature: The Short Story 3 credits (I)

Analysis of selected short stories with reference to elements of plot, character, setting, theme, point of view, and symbolism, with a focus on critical analysis. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
(S) = Spring Semester
(F/S) = Fall & Spring Semesters
(I) = Intermittent
(Arr) = Arranged

ENGL1120 Introduction to Literature: The Novel 3 credits (I)

Analysis of selected novels with reference to elements of plot, character, setting, theme, point of view, and symbolism, with a focus on critical analysis. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1130 Science Fiction 3 credits (I)

A study of highly imaginative literature representing modern trends in the writing of fantasy and science fiction. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1140 Introduction to Literature: Poetry 3 credits (I)

A study of poetry to develop an understanding of structural patterns, idioms, and meanings. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1150 Multicultural Literature 3 credits (I)

A study of multicultural literature to gain an understanding and an awareness of the cultural diversity in America: study of the conflicts and motivations, successes, and failures of those from different ethnic origins, economic backgrounds, and religious beliefs. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1170 From Literature to Film 3 credits (I)

Comparative analysis of literary works and their screen adaptations. Focus on aesthetic and interpretive similarities and differences. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1200 Introduction to Language 3 credits (I)

An introduction to topics in linguistics, including phonology (language sounds), syntax (sentence structure), semantics (meaning), morphology (word formation), and the applications of linguistics to fields such as language variation and language acquisition. MTC goal areas (2) Critical Thinking and (7) Human Diversity. (Prerequisites:  ; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1210 Introduction to Literature: Drama 3 credits (I)

A study of plays, focusing on identifying and analyzing themes, patterns, and conventions of drama. Emphasis is placed on seeing the human context, values, and assumptions embedded in dramas from the Ancient to Contemporary periods. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1212 Introduction to Women's Literature 3 credits (I)

This course is an introduction by women across cultures and time periods. Course will focus on memoirs/essays, novels, fiction, drama, and poetry by a variety of women who have helped shape the view of women in contemporary society. Students may participate in a service learning

project as part of the course. MTC goal areas: Humanities and Fine Arts, Human Diversity. (Prerequisites: ENGL1106) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL1214 Introduction to Adolescent Literature 3 credits (I)

This course covers a range of adolescent novels and short fiction from standard classics to current publications. Students will study common literary themes in adolescent literature and investigate the evolution of adolescent literary content in the past century. Literature will also be studied where it has been translated into film (where possible). MTC goal areas: (6) Humanities and Fine Arts and (7) Human Diversity. (Prerequisites: ENGL 1106 with a grade of "C" or better, equivalent, or instructor's consent.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2000 Poetry Writing 3 credits

Creative writing workshop in which students develop their original poetic work and voice through writing, reading, and responding to a variety of poetic styles and ideas. (Prerequisites: ENGL1100 or instructor's consent,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2002 Memoir Writing 3 credits

Creative writing workshop in which students explore their personal histories and environment through writing, reading, and responding to a variety of non-fiction styles and structures. (Prerequisites: ENGL1100 or instructor's consent,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2004 Fiction Writing 3 credits

Creative writing workshop in which students develop their own style and voice through writing, reading, and responding to a variety of fiction styles, forms, and techniques. (Prerequisites: ENGL1100 or instructor's consent,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2101 English Literature 12th to 17th Century 3 credits (F)

The study of important works of English literature from the twelfth through the seventeenth centuries. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2102 English Literature 18th Century to Present 3 credits (S)

The study of important works of English literature from the eighteenth through the twentieth centuries. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2105 American Literature: Pre-Colonial to Civil War 3 credits (F)

This course includes the study of major authors and movements of the Colonial, Revolutionary, Romantic, and Civil War periods of American Literature. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended;  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2106 American Literature: Civil War to the Present 3 credits (S)

This course includes the study of major American authors and movements from the turn of the century (1890-1910), including American literature written between World War I and World War II to the present. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended;  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2120 Introduction to African-American Literature 3 credits (I)

This course is an introduction to African-American literature through a study of representative samples of writing in a variety of genres. These writings will reflect the development of African-American literature over the past hundred years in America. Attention will be paid to the diversity and changes in the political climate both internal and external to African-American communities. MTC goal areas: (6) Humanities and Fine Arts and (7) Human Diversity. (Prerequisites: ENGL1106 with a grade of "C" or better, or equivalent, or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2130 Introduction to Native American Literature 3 credits (I)

This is an introduction to Native American oral tradition and its transition to today's literary works. Attention will be given to religious, political, familial, and economic pressures that have shaped today's emerging literary tradition. MTC goal areas: (6) Humanities and Fine Arts and (7) Human Diversity. (Prerequisites: ENGL1106 with a grade of "C" or better, equivalent, or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL 2132 Minnesota Literature 3 credits (I)

This course will introduce students to Minnesota writers through major forms of literature: novel, short story, poetry, drama, essay, autobiography, and prose. It is designed to provide students with a chance to get to know local literary artists through their work. Primary emphasis is on reading, discussing, interpreting, and writing about Minnesota literature. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL 1106 required; ENGL 1109 suggested.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2140 Modern World Literature 3 credits (I)

A survey of world literature written after World War II. Readings will include selections of fiction, poetry, and essays from Africa, the Middle East, Asia, Australia, Oceania, Europe, Latin America, the Caribbean, and North America. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better,  , READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2150 Shakespeare, the Elizabethan Age, and Contemporary Perspectives 3 credits (I)

An analysis of selected writing of William Shakespeare, including the Sonnets, the Tragedies, the Comedies, and the Histories in their cultural and historical context. Some emphasis will be given to Shakespeare's legacy in subsequent ages and cultures including his influence on contemporary popular culture. MTC goal areas: (2)

Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 and READ1450; prior elective in Humanities or English with a grade of "C" or better will be accepted in lieu of READ1450) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENGL2999 Special Topics in English 1-3 credits (I)

Study of special topics in English. Special course topics will be announced in the class schedule. (Prerequisites:  )

ENGL6000 Trade Communications 2 credits (F/S)

This course covers writing skills (sentence structure, grammar, punctuation, writing, spelling), locating and interpreting information, and listening and speaking skills, as applied to the trade careers. This course is occupational in nature and is not intended for transfer. (Prerequisites: ENGL0450 or equivalent) (2 hrs lec/0 hrs lab/0 hrs OJT)

Environmental Science

ENSC1200 Introduction to Environmental Science 4 credits (F/S)

The relationship of humans to their environment from local, regional, and global perspectives. Includes the study of natural ecosystems, the impact of human activity on natural resources and environmental quality, environmental ethics, and strategies to maintain a sustainable biosphere. Laboratory component includes experiences in the scientific method, basic ecological and environmental field techniques and assessment, and selected field trips to local agencies, research facilities, and businesses. Intended to fulfill general education requirement and serve as foundational course in environmental science/studies programs. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (10) People and the Environment. (Prerequisites:  ) (3 hrs lec/2 hrs lab/0 hrs OJT)

ENSC1202 Environmental Field Studies 1-3 credits

An opportunity for students to study and pursue areas of special interest by performing field research projects under the supervision of a faculty member. This course may include extended field trips to selected regions. (Prerequisites:   and math. Prior completion of or concurrent enrollment in a college-level science course.) (2 hrs lec/2 hrs lab + 1 week field experience)

ENSC1300 Meteorology 3 credits (F)

The weather elements are studied in detail to determine how they produce our weather. A climatological approach is used to develop an understanding of the weather elements and their distribution over the continent. MTC goal areas: (3) Natural Sciences. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ENSC2999 Special Topics in Environmental Science 1-3 credits (I)

Study of special topics in environmental science. Special course topics will be announced in the class schedule.

College Level Reading = 
College Level Writing = 

English as a Second Language**ESL0400 Intermediate Listening and Speaking 3 credits (I)**

This course is for students of English as a second language who are at intermediate level in listening and speaking skills. This course presents strategies for formal and informal communication, including active listening, asking for clarification, and responding appropriately. Students explore verbal and nonverbal aspects of effective communication. (Prerequisites: Appropriate score on the ESL Placement Test or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0410 Intermediate Reading 3 credits (I)

This course is for students of English as a second language who are at an intermediate level in reading skills. This course presents strategies for scanning, skimming, and reading a wide variety of academic and non-academic sources. Students build vocabulary and learn when and how to use a dictionary. (Prerequisites: Appropriate score on the ESL Placement Test or instructor's consent. (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0415 Intermediate Writing and Grammar 3 credits (I)

This course is for students of English as a second language who are at an intermediate level in writing skills. This course presents strategies for writing effective sentences and paragraphs. Students explore basic sentence structures, essential grammar points, and general writing conventions. (Prerequisites: Appropriate score on the ESL Placement Test or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0420 Advanced Listening and Speaking 3 credits (I)

This course is for students of English as a second language who are at an advanced level in listening and speaking skills. This course presents strategies for improving listening comprehension, conversation skills, and presentation skills. Students explore academic skills such as controlling a conversation, communication within a group, and effectively supporting a position. (Prerequisites: Appropriate score on the ESL Placement Test, satisfactory completion of ESL 0400, or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0430 Advanced Reading 3 credits (I)

This course is for students of English as a second language who are at an advanced level in reading skills. This course presents strategies for skillful reading of academic texts and literature, including annotating, making inferences, identifying a writer's purpose, and distinguishing between main ideas and support. Students practice using context clues, word parts, and a dictionary to develop vocabulary. (Prerequisites: Appropriate score on the ESL Placement Test, satisfactory completion of ESL 0410, or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0435 Advanced Writing and Grammar 3 credits (I)

This course is for students of English as a second language who are at an advanced level in writing skills. This course presents strategies for writing paragraphs and basic essays using a writing process that includes generating ideas, planning, writing, and editing. Students explore more

complex sentence structures, advanced grammar points, techniques for increasing coherence, and academic writing conventions. (Prerequisites: Appropriate score on the ESL Placement Test, satisfactory completion of ESL 0415, or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL0440 English as a Second Language for Academic Purposes 3 credits (I)

This integrated course is for students of English as a second language who are at an advanced level in reading, writing, listening, and speaking. Students practice reading, writing, listening, and speaking skills to prepare for major courses of study that require a high level of competence in the English language. (Prerequisites: Appropriate score on the ESL Placement Test; satisfactory completion of ESL 0420, ESL 0430, and ESL 0435; or instructor's consent.) (3 hrs lec/0 hrs lab/0 hrs OJT)

ESL2999 Special Topics in English as a Second Language 1-3 credits (I)

Study of special topics in English as a second language. Special course topics will be announced in the class schedule.

Fire Technology & Administration**FIRE1401 Today's Fire Service 2 Credits (F/S)**

This course is designed to familiarize the student with the modern fire service. Included is a historical perspective of how evolution shaped the present day fire department. Different aspects of the fire service will be addressed, including hiring practices, the working environment, and an introduction to the employee/employer relationship. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

FIRE1405 Recruit Fire Fighter 2 Credits (F/S)

This course is designed to meet all the Standards of NFPA 1001, Fire Fighter I. "The person, at the first of progression as defined by NFPA1001, who has demonstrated the knowledge and skills necessary to function safely and effectively as an integram member of a fire fighting team. When engaged in hazardous activities, the Fire Fighter I works under direct supervision." (Prerequisites: Concurrent enrollment in FIRE1441 and current medical approval – medical physical) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE1410 Building Construction 3 credits (F/S)

This course covers the basic building construction techniques and types as they apply to fire fighter safety, fire behavior, and building behaviors when subjected to fire. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

FIRE1420 Inspection, Codes and Practices 3 credits (F/S)

The Uniform Fire Code, the NFPA Life Safety Code, the Uniform Building Code, and the basics of conducting a fire prevention inspection will be learned through lecture, worksheets, and basic inspections. The student will also learn the details of inspection preparation, delivery, and methods for taking corrective actions. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

FIRE1430 Hazardous Materials, Operations 2 credits(F/S)

This course is designed to meet NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Operations Level. This course is also designed to comply with 29 CFR 1910.120 Hazardous Materials Operations Level. (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE1431 HazWoper/Safety Refresher 1 credit (Arr)

This course is designed to meet the requirements of various OSHA ongoing training requirements for various types of CFR part 29 industries. It focuses on what to do in a Hazardous Materials emergency both on and off site. Various types of environmental monitoring methods are used by the students, along with the equipment they need to assess the problem. Required reports are also covered. (Prerequisites: Initial OSHA HazWoper Training as required by CFR 29 1920.120) (1 hr lec/0 hrs lab/0 hrs OJT)

FIRE1441 Recruit Fire Fighter Lab 2 credits(F/S)

This course is designed to meet all the Standards of NFPA1001, Fire Fighter I. "The person, at the first of progression as defined by NFPA1001, who has demonstrated the knowledge and skills necessary to function safely and effectively as an integral member of a fire fighting team. When engaged in hazardous activities, the Fire Fighter I works under direct supervision. (Prerequisites: Concurrent enrollment in FIRE1405) (0 hrs lec/4 hrs lab/0 hrs OJT)

FIRE1450 Fire Apparatus Operation 2 credits(F/S)

This covers the major types of fire fighting apparatus such as pumpers, aerial apparatus, and other support vehicles. Students will be taught operation and operator maintenance of these specific vehicles. (Prerequisites: Valid driver's license) (0 hrs lec/4 hrs lab/0 hrs OJT)

FIRE1460 Fire Fighting Tactics and Strategy 3 credits(F/S)

This course covers the basic fire fighting tactics and strategy used in all types of fire emergencies. Preplanning, size up, and application of tactics based on the selected strategy will be described and simulated for student learning. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

FIRE1470 Natural Cover Fire Fighting 2 credits(F/S)

This course covers basic fire fighting operations and equipment used in wildland fire fighting. The course will use appropriate state and federal wildland fire fighting procedures and references. There will be live fire exercises. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE1480 Basic Aircraft Rescue and Fire Fighting 3 credits(Arr)

This class is designed to provide the basic skills needed by a fire fighter working in an aircraft and airport environment. It covers all of the skills enumerated by the Federal Aviation Administration in the Part 139 regarding emergency fire and rescue operations. There will be live fire exercises involved that cover multiple types of fire emergencies related to aircraft operations both in the air and on the ground. Students will also cover the basics of aircraft rescue and fire fighting vehicle operations and tactics. (Prerequisites: None) (2 hrs lec/2 hrs lab/0 hrs OJT)

FIRE1510 Public Fire Education 2 credits(F/S)

This course covers public fire education programs that are used throughout the United States and will teach the student the fundamental techniques involved in education. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

FIRE1520 Rope Rescue Techniques 1 credit (F/S)

This course is designed to teach the student the safest and most appropriate ties, lifts, and belays for proper application to rescue or other evolutions of the fire service. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

FIRE1530 Low Angle Rescue 1 credit (F/S)

This course is designed to teach the student proper techniques for safely performing rescues on low angle rugged terrain. The student will be able to perform rescues and patient transfer from both above and below when the patient is conscious or unconscious. (Prerequisites: FIRE1520 or FIRE2500, or instructor consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

FIRE1540 Fire Fighter I and II 3 credits(F/S)

The intent of this course is to teach the student the minimum job performance requirements for a professional fire fighter in accordance with the National Fire Protection Association 1001, Fire Fighter Professional Qualifications and the National Fire Protection Association 1403, Live Fire Training for Evolutions In Structures. This course must be taken in concert with FIRE1550. (3 hrs lec/0 hrs OJT)

FIRE1550 Fire Fighter I and II Lab 3 credits(F/S)

The intent of this course is to teach the student the minimum job performance requirements for a professional fire fighter in accordance with the National Fire Protection Association 1001, Fire Fighter Professional Qualifications and the National Fire Protection Association 1403, Live Fire Training for Evolutions In Structures. This course must be taken in concert with FIRE1540. (Prerequisites: Doctors medical approval required) (0 hrs lec/6 hrs lab/0 hrs OJT)

FIRE1556 EMS First Responder 3 credits(Arr)

This is a Department of Transportation course that can lead to certification as a First Responder both at the state and national levels. This course covers the basics of out-of-hospital emergency care and patient packaging. It emphasizes use of available materials as well as prepackaged medical care supplies. (Prerequisites: If the student wishes to attain either state or national registration they must be 18 years of age prior to taking the exams and must be free of any felony convictions.)

FIRE1558 EMS First Responder Refresher 1 credit (Arr)

This course fulfills the requirements for ongoing certification as a First Responder at either the state or national level. It covers all the topical areas included in the Department of Transportation EMS First Responder Curriculum. (Prerequisites: Current certification as a First Responder) (0 hrs lec/2 hrs lab/0 hrs OJT)

FIRE1560 Emergency Medical Technician-Basic 6 credits (F/S)

This is a Department of Transportation course for the certification of out of hospital care personnel. The course covers the basic emergency care concepts and practices required to work on a Basic Life Support ambulance throughout the United States. It covers basic to the more advanced techniques and principles of out of hospital care. (Prerequisites: 16 years old to take course and 18 years old to attain national certification. You must have a felony-free record to become nationally certified) (2 hr lec/8 hrs lab/0 hrs OJT)

FIRE1565 Wilderness Survival 2 credits (S)

At the completion of this course, knowledge and experience gained through practical application of the concepts covered in the classroom will give an individual the tools they might need to survive in a wilderness environment with minimal equipment. This course is applicable to anyone who might find themselves in a survival situation away from civilization and supplies. Pilots, sportsmen, rescue workers, and others who might find themselves in the outdoors by circumstance and not by choice will benefit from the concepts presented. The goal is to raise awareness and the ability to make sound decisions in critical situations, and to be able to prioritize needs based on what is going on around the individual or group. (Prerequisites: None) (1 hr lec/2 hours lab/0 hrs OJT)

FIRE2400 Fire Service Reporting 3 credits (F)

This course covers the fundamentals of writing reports and the written transmission of official information required of fire service personnel. This information includes SOP/SOG's MNFIRS/NFIRS run reports including confined space and HazMat, and related letters, memos, and press releases. The principles of clear writing, grammar, spelling, and punctuation will be studied to complete required documentation. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

FIRE2411 Recruit Fire Fighter II 2 credits (F/S)

This course is designed to meet all the Standards of NFPA1001, Fire Fighter II. The person, at the second level of progression as defined by FNPA1001, who has demonstrated the skills and depth of knowledge necessary to function under general supervision. This person will function safely and effectively as an integral member of a team of equally or less experienced fire fighters to accomplish a series of tasks. When engaged in hazardous activities, the Fire Fighter II maintains direct communication with a supervisor. (Prerequisites: FIRE1405 and FIRE1441) (0 hrs lec/4 hrs lab/0 hrs OJT)

FIRE2420 Fire Instructor 2 credits (F)

This course will focus on educational techniques both within and outside of the fire service. (Prerequisites: 10 FIRE prefix credits or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2430 Fire Officer 2 credits (F)

This course is designed to introduce the student to the role of the Fire Officer. The course will focus on individual development, leadership techniques, team building, and problem solving. (Prerequisites: 15 technical credits or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2440 The Chemistry of Hazardous Materials 3 credits (F)

This course is designed to increase the working knowledge of the hazardous materials responder. Emphasis will be placed on understanding the basic chemical behavior and reasons for this behavior for hazardous materials. (Prerequisites: Hazard materials operations course; a college chemistry course is also strongly recommended) (1 hr lec/4 hrs lab/0 hrs OJT)

FIRE2460 Fire Inspection and Prevention Applications 3 credits (S)

The techniques and application of fire inspection and prevention practices will be developed and applied. Advanced concepts, code enforcement, and public education will be the primary focus with some special hazards explored. (Prerequisites: FIRE1420 or instructor's consent) (1 hr lec/4 hrs lab/0 hrs OJT)

FIRE2470 Fire Investigation 3 credits (S)

An analysis of fire investigation from the viewpoint of the field investigator, with emphasis on the basic techniques of identifying the point of origin, the detection of arson, collection and preservation of evidence, investigation, interviews, related legal aspects and documentation. (Prerequisites: 20 technical credits from FIRE or instructor's consent) (2 hr lec/2 hrs lab/0 hrs OJT)

FIRE2500 Rescue 2 credits (S)

This course covers the basic rescue techniques, tools, and equipment. Specifically, students will participate in high-level rescue, ice rescue, auto extrication, and water rescue. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2511 Company Functions 1 credit (F/S)

This course is designed to apply the knowledge and skills from previous courses and translate their applications to the fire ground. To specifically address Engine and Truck Company functions and their inter-relationship on the fire ground. (Prerequisites: FIRE1405 and FIRE1441 or FIRE1540 and FIRE1550) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2520 Fire Management 2 credits (F)

This course covers the basic management techniques and procedures to improve crew production and morale. Other information will address the details of tactical response, budgeting processes, and the written information required for a fire department. (Prerequisites: 20 FIRE prefix credits) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2530 Fire Apparatus, Advanced 2 credits (Arr)

This course will focus on advanced techniques of fire apparatus operations including complex pumping situations and aerial evolutions. (Prerequisites: FIRE1450) (0 hrs lec/4 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
 (S) = Spring Semester
 (F/S) = Fall & Spring Semesters
 (I) = Intermittent
 (Arr) = Arranged

FIRE2540 High Angle Rescue 1 credit (S)
 This course is designed to teach the student proper techniques for safely performing rescues on steep or vertical terrain. The student will be able to perform rescues and patient transfer from both above and below when the patient is conscious or unconscious. (Prerequisites: FIRE1520 or FIRE2500 or instructor consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

FIRE2550 Confined Space Rescues 1 credit (F/S)
 This course is designed to acquaint students with the applicable State and Federal regulations pertaining to confined space operations. It will enable the students to select and use proper monitoring, ventilation, and retrieval systems for safe and effective confined space entry and rescue situations. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

FIRE2560 Chemistry of Hazardous Materials II 2 credits(Arr)
 This course is designed to increase the working chemical knowledge of the fire fighter and will focus on corrosive acids and alkalis, flammable solids, Class A fuels, and the hazards of plastics. (Prerequisites: FIRE2440 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2570 Hazardous Materials, Technician 3credits (Arr)
 This course is designed to meet NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Technician Level. This course is also designed to comply with 29 CFR 1910.120 Hazardous Materials, Technician Level. (Prerequisites: FIRE1430 and FIRE2440 or instructor's consent) (1hrs lec/4hrs lab/0 hrs OJT)

FIRE2600 EMT-Refresher 2 credits(Arr)
 This course covers the material and new techniques for the currently practicing EMT-Basic to successfully make the transition to the 1992 DOT curriculum. It will prepare the student to take the exams required by the MNEMSRB and the NREMT to continue providing emergency care in the field. The student must be currently registered as an EMT-Basic, or no more than one year past the expiration date. (Prerequisites: Current state or national registration as an EMT-B) (1 hr lec/2 hrs lab/0 hrs OJT)

FIRE2610 Fire Internship 100 1 credit (Arr)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters. (Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (100 hrs/semester OJT)

FIRE2620 Fire Internship 200 2 credits(Arr)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters.

(Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (200 hrs/semester OJT)

FIRE2630 Fire Internship 300 3 credits(Arr)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters. (Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (300 hrs/semester OJT)

FIRE2640 Fire Internship 400 4 credits(Arr)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters. (Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (400 hrs/semester OJT)

FIRE2650 Fire Internship 500 5 credits(Arr)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters. (Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (500 hrs/semester OJT)

FIRE2660 Fire Internship 600 6 credits (ARR)
 This course is designed to give the student actual fire department experience while under close supervision. Program length and hours vary dependent on each fire department's schedule and needs. The student will be assigned a duty shift and will follow the rules of the internship and the rules of the individual department. This course may be taken for a maximum of three semesters. (Prerequisites: Refer to the specific requirements of each internship agreement, and successful completion of 18 FIRE prefix credits) (600 hrs/semester OJT)

FIRE2999 Special Topics in Fire Technology and Administration 1-3 credits (I)
 Study of special topics in fire technology and administration. Special course topics will be announced in the class schedule.

French

FREN1010 Beginning French I 5 credits (I)
 This course is designed to give students a basic knowledge of the French language and culture through readings, study of grammar, pronunciation, and spelling. This course meets language requirements for admission to selective colleges and universities. (Prerequisites:  , or instructor's consent) (5 hrs lec/0 hrs lab/0 hrs OJT)

FREN1020 Beginning French II 5 credits (I)
This course is designed to give students a basic knowledge of the French language and culture through readings, study of grammar, pronunciation, spelling, and conversation. This course meets language requirements for admission to selective colleges and universities. (Prerequisites: FREN1010) (5 hrs lec/0 hrs lab/0 hrs OJT)

FREN2010 Intermediate French I 3 credits (I)
Intermediate level listening, speaking, reading and writing with an intensive review of the fundamentals of the French language. Readings deal with social and cultural topics of French-speaking countries with emphasis on vocabulary building. (Prerequisites: FREN1010, FREN1020 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OT)

FREN2999 Special Topics in French 1-3 credits (I)
Study of special topics in French. Special course topics will be announced in the class schedule.

Geography

GEOG1110 Human Geography 3 credits (F/S)
Human Geography is the study of people, places, cultures, and the environment from a global perspective. Students learn about human populations and migrations, the world's cultural groups and realms, the political organization of the world, the global economy, and lifestyle differences between more and less developed regions. MTC goal areas: (5) History and the Social and Behavioral Sciences and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

GEOG1120 Physical Geography 4 credits (F)
Students are introduced to the physical systems of the earth. Weather and climate, the earth's vegetation and ecological regions, and the processes of mountain building and gradation which shape the earth's landscapes are studied from a global perspective. MTC goal areas: (3) Natural Science and (10) People and the Environment. (Prerequisites:  ) (3 hrs lec/2 hrs lab/0 hrs OJT)

GEOG1202 Introduction to Maps 3 credits
This course focuses on the creation and use of maps. Beginning with a historical perspective of map production, students will learn fundamental skills in mapmaking, reading, and interpretation. More recent cartographic techniques will be explored, including GIS, GPS, and remote sensing. Laboratory component is fulfilled through a series of hands-on exercises in map analysis, cartographic techniques and skills. This course is designed to be a general education course and fulfills MTC goal areas: (3) Natural Sciences and (10) People and the Environment. (Prerequisites:  ) (2 hrs lec/2 hrs lab/0 hrs OJT)

GEOG1204 GIS 1: Concepts and Applications 3 credits
This course will introduce students to the fundamental concepts of Geographic Information Systems (GIS). Students will study vocabulary, and concepts of GIS mapping, and will apply these concepts throughout a series of lab exercises designed to build fundamental understanding and skills of GIS. (Prerequisites: GEOG 1202 or instructor's consent.  ) (2 hrs lec/2 hrs lab/0 hrs OJT)

GEOG2999 Special Topics in Geography 1-3 credits (I)
Study of special topics in geography. Special course topics will be announced in the class schedule.

Geology

GEOL1110 Introduction to Geology 4 credits (S)
Students are introduced to the materials of the earth's crust and learn how to identify the earth's primary rocks and minerals. Students study the geologic processes of the earth: plate tectonics, volcanic activities, earthquakes, weathering, erosion, glaciation, and landscape change. Other topics include geologic time, earth resources, and environmental problems. MTC goal areas: (3) Natural Science and (10) People and the Environment. (Prerequisites:  ) (3 hrs lec/2 hrs lab/0 hrs OJT)

GEOL1115 Minnesota's Geology 4 credits ()
Students are introduced to the 3.6 billion year geologic history of Minnesota. From its earliest volcanoes, mountain ranges, inland oceans, to its infamous glaciers during the last ice age. Some local and regional field trips required. MTC Goal Areas: 3 (Natural Sciences) and 10 (People and the Environment). (Prerequisites:  and ENGL 0450 or equivalent). (3 hrs lec/2 hrs lab/0 hrs OJT)

GEOL2999 Special Topics in Geology 1-3 credits (I)
Study of special topics in geology. Special course topics will be announced in the class schedule.

History

HIST1105 U.S. Labor History 3 credits
This course will focus on the history of the labor and working class movement in the U.S. from 1750 to the present. The course will profile major labor milestones, their legal and political implications, and their impact on society as a whole. It will illuminate history through the stories and songs that have reflected people's struggles and triumphs in their relationship with political and economic institutions. (Prerequisites: HIST1220 or consent of instructor.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST1110 European History 3000 B.C. to 1870 3 credits (F)
The study of the Medieval World, the Renaissance, the Reformation, the expansion of Europe, the rise of monarchical states, the scientific revolution, the enlightenment, revolutionary nationalism, the decline of absolutism, the forces of liberalism and nationalism, and the industrial revolution. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST1120 European History 1870 to Present 3 credits (S)
The study of the industrialist and nationalist competition, the Great War, the rise of totalitarianism, the Second World War, the decline of colonialism, and the rival state systems in the post-war era. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST1210 American History 1600 to 1876
3 credits (F)

The study of the survey of the political, economic, and social history of the United States during the colonial and early national periods, as well as expansionism, sectionalism, Civil War and reconstruction. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST1220 American History 1876 to Present
3 credits (S)

The study of survey of the political, economic, and social history of the United States during the periods of industrialization and imperialism, as well as, the twentieth century. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST1225 The Modern Middle East 3 credits (S)

The Modern Middle East and its history, politics and culture. Special emphasis will be placed on the historical background that has led to the current political turmoil in that region. A related area of scrutiny will be Islam, the Koran (Qur'an) and what they have to do with the current crisis that is now international in scope. MTC Goal Areas: (2) Critical Thinking, (5) History, (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT).

HIST2110 Minnesota History 3 credits (I)

This course is a survey of Minnesota's history from European discovery to the present. Topics include Indian life in Minnesota; exploration and the fur trade; European competition over Minnesota; initial American settlement; statehood; the Dakota Conflict; the Civil War, agriculture, lumbering, mining, and industry in nineteenth century Minnesota; the Progressive Period; the 1920s; the Depression, World War II's impact on Minnesota; and the state's political and economic history since 1945. MTC goal areas: (2) Critical Thinking and (5) History and the Social and Behavioral Sciences. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST2130 Vietnam: American's Longest War
3 credits (F/S)

The Vietnam War was a divisive event in American history which has had repercussions and far-reaching consequences. This course examines the cultures, people, and geography of Indochina, American's initial interest in Vietnam during World War II, the gradual involvement of America from 1945 to 1960, the policies that Kennedy, Johnson and Nixon pursued in Southeast Asia, the war at home and student protests, the Paris Peace Accords of 1973, the fall of Indochina to communism, and the effects of the war on the Indochinese and on American society. [This course is unique because it uses the popular music of the period as a teaching tool that effectively supplements the textbook and lectures in providing student with insight into historical context of the Vietnam War.] MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (9) Ethics and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HIST2999 Special Topics in History 1-3 credits (I)
Study of special topics in history. Special course topics will be announced in the class schedule.

Health

HLTH1210 Nutrition 2 credits (F/S)

This course covers an introduction to the basic principles of nutrition. Course content includes: the role of nutrients in the maintenance of normal health, the effects of nutrition on disease, nutrition in the human life cycle, food behaviors and diet planning. Students complete a self-analysis of their own diets. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

HLTH1400 Wellness Careers 2 credits (I)

This course will examine the rapidly developing field of wellness education. Special attention will be devoted to the future selection of professional careers based upon local, regional and national job market demands. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

HLTH1405 Tobacco, Alcohol and Other Drugs
2 credits (S)

This course is designed to introduce students to holistic health related to drug use and abuse. Medical, psychological, sociological and legal aspects of drug use and abuse will be examined with emphasis on how people use and abuse drugs in our society. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

HLTH1410 Nutrition in Athletic Performance
2 credits (I)

This course is designed to introduce the student to principles of nutrition as they specifically relate to the unique needs of physically-active people and athletes. The course builds on the knowledge of basic nutrition to provide the student with an understanding of how to use nutrition to get the most out of training and sports performance. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

HLTH1430 Personal Wellness 3 credits (I)

A study of the balance necessary to live a vital and healthy lifestyle. The course integrates components of physical, mental, social, emotional, environment, occupational, academic, spiritual and cultural needs as part of a multi-pronged approach to wellness. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HLTH2999 Special Topics in Health 1-3 credits (I)
Study of special topics in Health. Special course topics will be announced in the class schedule.

Humanities

HUM1105 Introduction to Popular Culture
3 credits (I)

A study of popular culture (film, television, literature, advertisements, music) in relation to the mythological and archetypal characters and motifs they depict. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1110 The Bible as Literature 3 credits (S)
Selected readings and analysis of Old and New Testaments with emphasis on literary characteristics of the text, including archetypal plots, patterns and characters. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1115 Introduction to Humanities: The Renaissance Through the Contemporary Periods 3 credits (I)

This course explores the human heritage from the Renaissance through the contemporary periods and considers the impact the Renaissance, industrial revolution, and realism had on the modern world. Attention will be given to all aspects of human achievement, including, but not limited to, sociological, political and economic systems; art, literature, and architecture; and mythology, religion, and philosophy. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1117 American Film 3 credits

This course focuses on analysis of the major films of three American directors – Stanley Kubrick, Sam Peckinpah, and Francis Ford Coppola – whose groundbreaking work has influenced American cinema for nearly forty years. The collapse of the Hollywood studio system in the early 1960s made possible the flourishing of the first true American auteurs, and directors such as Kubrick, Peckinpah, and Coppola were freed to explore the boundaries of their personal artistic visions. Their cinematic innovations and their influence on subsequent generations of filmmakers will be closely scrutinized via analysis of each director's major films. Attention will be given to each director's unique world-view and their signature techniques of cinematic communication. MTC goal areas (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 or equivalent; READ1450 highly recommended.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1119 British Film 3 credits

This course focuses on analysis of the major films of three British directors – David Lean, Ridley Scott, and John Boorman. While their values are firmly rooted in 19th century British romanticism, their cinematic innovations and personal visions have resulted in classic and award-winning films such as *The Bridge on the River Kwai* and *Lawrence of Arabia* (Lean), *Alien* and *Gladiator* (Scott) and *Deliverance* and *Hope and Glory* (Boorman). The signature styles and concerns of each director, and their influence on the filmmakers that followed them, will be closely analyzed in these and other films. MTC Goal Areas (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 or equivalent; READ1450 highly recommended.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1120 Introduction to Humanities: The Classical Through Medieval Periods 3 credits (I)

This course explores the human heritage from the beginning of recorded history through the Medieval period and considers the impact of this heritage on the modern world. Attention will be given to all aspects of human achievement, including, but not limited to, sociological, political, and economic systems; art, literature, and architecture; and mythology, religion, and philosophy. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1121 Women and Film 3 credits

This course explores the films and signature contributions to cinema, culture, and society of American and international filmmakers. Emphasis will be given to analysis of films displaying the range and diversity of female experience in a variety of cultural and historical milieu. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1123 Film Genres: The Science Fiction and Fantasy Film 3 credits

An examination and analysis of the conventions and innovations in the science fiction and fantasy film genre. Emphasis will be placed on the explication of landmark SF&F films from Fritz Lang's *Metropolis* (1926) to Peter Jackson's *Lord of the Rings* trilogy (2003). MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 or equivalent; Prior completion of HUM1140. Modern Fantasy very helpful but not required.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1125 Introduction to Humanities: The Arthurian Legend 3 credits (I)

This course explores the Arthurian Legend from its beginnings to the contemporary period. Attention will be given to all aspects of the development of the legend, including, but not limited to, historical, sociological, political; art, literature, film; and mythology, religion and philosophy. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1130 World Religion 3 credits (I)

Exploration of the teachings and practices of several major world religions selected from ancient and classical polytheism, Zoroastrianism, Gnosticism, Christianity, Judaism, Islam, Taoism, Buddhism, Hinduism, and various Native American, African and Australian cultures. Emphasis given to literary as well as scriptural texts. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

HUM1133 Introduction to Taoism 3 credits

This course provides an introduction to Taoist philosophy and its evolution from its origins in China through its reinterpretation in the contemporary West. The course will examine Taoism from a variety of perspectives, including as a religion and as a habit of thought. Attention will be given to the historic, cultural, and philosophical milieu in which Taoism originated and evolved. The first part of the course will focus on analysis and interpretation of the teachings of Lao Tzu and Chuang Tzu, both in historical and contemporary context. The second part of the course will examine the influence of Taoism on Western thought as reflected in art, literature and popular culture. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended. 📖✍️) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1135 Utopian Images: Fiction and Fact 3 credits (S)

Exploration of the model societies human beings have imagined in fiction and attempted to construct in fact. The course examines ideal communities as expressed in Utopian treatises, science fiction, pastoral poetry and art, religious traditions, architecture, urban designs, and elements of contemporary popular culture. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (7) Human Diversity. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1137 Introduction to Buddhism 3 credits

Study of Buddhism in its historical, philosophical, and cultural context, beginning with its origin in India, its essential tenets, and its dissemination through Southeast Asia and beyond. The course will begin with analysis of primary Buddhist scriptures and commentaries upon them. Emphasis will be placed on the evolution of Theravadan philosophy and the emergence of Mahayana and Tibetan Buddhism as distinct belief systems. Considerable emphasis will be placed on Buddhism's relationship to other world religions and Buddhism's influence on contemporary Western philosophy and media. (Prerequisites: ENGL1106; READ1450 highly recommended. 📖✍️) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1140 Modern Fantasy 3 credits (F)

This course explores the diversity of human imagination in diverse cultures. Emphasis is given to non-technological speculative fiction, such as that dealing with alternate realities, alternate histories, fantastic anthropomorphic creatures, and the horror genre of literature. Attention is given to the unprecedented rise in popularity of the fantasy/horror genre in the twentieth century and its corresponding sociological, psychological, political, and economic roots. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (7) Human Diversity. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1160 Classical Greek and Roman Mythology 3 credits (I)

The course includes important classical Greek and Roman myths, their major archetypal patterns, and their interpretation by various authors. This course is designed as a foundation to prepare students for other literature courses by introducing them to the literary illusions and mytholog-

ical references found in American, British, and other literatures. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1180 World Mythology 3 credits (I)

An analysis and comparison of selected world myths. Considerable emphasis will be placed on discerning archetypal characters, plots and motifs and the discovery of universal patterns of human behavior in the myths. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM1190 Folklore 3 credits (I)

Readings in folk tales, myths, fairy tales, and narrative poetry based on folk materials. Folk representations in a variety of media, including literature, film, music, and art will be examined, with some emphasis on the evolution and interpretation of the contemporary American urban legend. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, (7) Human Diversity. (Prerequisites: ENGL1106 with a grade of "C" or better; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2000 Topics in Humanities 1 credit (I)

This course offers an opportunity to explore various topics in the Humanities. The subject matter will vary but will always be focused on global themes. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: 📖✍️) (1 hr lec/0 hrs lab/0 hrs OJT)

HUM2003 Latin American Culture and Civilization 3 credits

In this course the students will examine the history of Latin America in relation to its culture and civilization. Also, they will research the Mexican Conquest from two viewpoints: the traditional version and the Aztec version. Through the literature, art, music, and video components, students will be able to better analyze and understand important aspects of the Latin American cultures. MTC goal areas: (5B) Social and Behavioral Sciences and (8) Global Perspective. (Prerequisites: 📖✍️) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2005 Mexican Culture and Civilization 3 credits

This course examines the history of Mexico in relation to its culture and civilization. Through the literature, art, music, and video components, students will analyze and understand important aspects of the Mexican history and culture. MTC goal areas: (5B) Social and Behavioral Sciences and (8) Global Perspective. (Prerequisites: 📖✍️) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2007 Latino Culture in the U.S. 3 credits

This course addresses three Latino groups in the U.S.: the Mexican-American (Chicanos), the Cuban-Americans, and the Puerto Ricans. Students will study these three communities with the final outcome of understanding better their socio-history, economics, and politics. Students will also study their artistic expression in relation to themes that are important to the communities. MTC Goals: (7) Human Diversity. (Prerequisites: 📖✍️) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2010 Understanding Archetype, Dream, and Symbol 3 credits (I)

Introduction to archetypal theory and its application in daily personal and public life. Through the analysis of various media, including art, film, folklore, and personal writing, students will learn to identify cultural icons and the meanings behind them. Emphasis placed on the historical, psychological, and sociological origins of symbolism as a vehicle of communication. An underlying premise is that the personal unconscious as reflected in the individual dream is the ultimate source of the societal dream as reflected in popular culture. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts and (8) Global Perspective. (Prerequisites: ENGL1106 or equivalent; prior completion of at least one 3 credit Humanities-designated course; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2015 Film Appreciation 3 credits (2)

This course examines the motion picture as an art form and as a medium for cultural expression, exploring the origins and evolution of film and the film industry through selected screenings, readings, and analysis. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (8) Global Perspective. (Prerequisites: ENGL 1106 with a grade of "C" or better; READ 1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2100 Children's Media 3 credits (F)

An examination of children's literature, folklore, film, and television through the study of the history of children's media, as a reflection of ethnic culture, the parallels between children's and adult's media, and the characteristics and genres of children's media. Emphasis given to both media directed at children and the portrayals of childhood (toddler through adolescent) in popular culture. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts and (7) Human Diversity. (Prerequisites: ENGL1106 or equivalent; READ1450 highly recommended) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM 2117 Film Genres: The Horror Film 3 credits

An examination and analysis of the conventions and innovations in the horror film genre. Emphasis will be placed on the explication of landmark horror films from the folkloric *Nosferatu* (1922) to the technologically based horror of contemporary films. (Prerequisites: ENGL1106 with a grade of "C" or better; Prior completion of HUM1140; READ1450 highly recommended.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2119 Film Genres: The Western 3 credits

From the mid-1920s to the mid-1960s, Hollywood produced more Westerns than any other kind of film; the Western is the quintessential American film in terms of quality, quantity, and longevity. This course will examine the reasons for this phenomena, as well as explore the evolution of the Western from its silent origins, through the revisionist cinema of Peckinpah and Eastwood, and the Western's revival in the 1980s, 1990s, and beyond. Emphasis will be placed on the role of the Western in American identity formation and on the American Western as a reflection of literary romanticism and realism. Special emphasis will be placed on analysis of iconoclastic, genre-expanding films such as Zinnemann's *High Noon*, Peckinpah's *The Wild Bunch*, and Eastwood's *Unforgiven*. (Prerequisites: ENGL1106 with a grade of "C" or better;

American Film OR Film Appreciation with a grade of "C" or better; READ1450 highly recommended.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

HUM2999 Special Topics in Humanities

1-3 credits (I)

Study of special topics in humanities. Special course topics will be announced in the class schedule.

Italian**ITAL1000 Italian Life and Culture** 3 credits (I)

The Italian Life and Culture course is designated to offer students an interesting and stimulating way to develop and increase their knowledge of Italian life, culture and society. The course will explore different areas of Italian life and culture, including geography, music, opera, costume, politics, and economics. MTC Goal areas: (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

ITAL1010 Italian Language for Beginners

3-5 credits (I)

This course in Beginning Italian focuses on grammar, vocabulary, conversational skills, and Italian culture and geography. It is designed for students with no prior experience of Italian Language. MTC goal areas: (8) Global Perspective. (Prerequisites:  ) (3-5 hrs lec/0 hrs lab/0 hrs OJT)

Paralegal Studies**LGST1400 Legal Studies I: Terminology, Procedures, and Documentation** 3 credits (F)

This course introduces the student to the specific terminology and procedures used by paralegal professionals and to the proper documentation of legal information. It also covers legal ethics, legal analysis, legal evidence, and investigation. (Prerequisites: Keyboarding/word processing ability,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1410 Legal Studies II: Research and Document Preparation 3 credits (S)

This course covers methods of research and document preparation used by the legal profession, including citation forms, appellate procedure within the specific areas of the law. The administration of a law office and formal advocacy are included, as well as a review of legal writing style. (Prerequisites: LGST1400 or instructor consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST 1415 Legal Ethics for Paralegals 3 credits (F)

This course covers the ethical obligations of paralegals and other Legal support staff personnel. The course includes in-depth study of the ethical rules that govern the work of attorneys, paralegals, and others who work in the legal environment. (Prerequisites: LGST1400 or instructor consent.  ) (3 hrs lec/0 hrs lab/0hrs OJT)

LGST1420 Business Law – An Introduction

3 credits (S)

This course is an introductory course in the principles of business law as they apply to citizens and businesses. Topics include the legal system, contracts, sales, agency and employment law, and business organizations. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST 1425 Business Law – Advanced Topics 3 credits (I)

This course is a continuation of the study of the principles of business law as they apply to citizens and businesses. Topics include administrative law, negotiable instruments, secured transactions, creditor/debtor relations, insurance, real and personal property, and wills and trusts. (Prerequisites: LGST 1420 or instructor consent.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1430 Advanced Legal Research 3 credits (S)

This course examines advanced and specialized approaches to utilizing the legal sources available in the law library and online. In addition to research techniques, the course explores methods of analyzing and communicating research results. (Prerequisites: LGST1410 or instructor consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1440 Constitutional Law and Civil Liberties 3 credits (I)

This course is designed to provide an introduction to the United States Constitution and its amendments. Students will study the allocation of powers, the system of checks and balances, and the concept of individual rights, liberties, and protection. Through this course students will also develop a better understanding of the Bill of Rights. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1450 Contract Law 3 credits (S)(I)

This course introduces the student to the specific terminology, concepts and procedures for the development of contracts as well as identifying remedies for breach. The formation of contracts for the sale of goods under the Uniform Commercial Code will be included in the course. (Prerequisites: LGST1420,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1460 Criminal Law 3 credits (I)

This course begins with an overview of the concept of punishment and goes on to study the burden of proof and criminal defenses; it also provides a critical look at the most common crimes. Students will learn common terminology in criminal law and how to consider a crime thoroughly in terms of its elements. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1470 Wills, Trusts and Probate 3 credits (I)

This course discusses the paralegal's role in estate planning. The course will explore various tools available to achieve the goal of estate planning: wills, trusts, durable powers of attorney, intra-family gifts, and charitable transfers. Students will also be exposed to the ethical issues involved in estate planning and the increasing use of living wills and health care proxies. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1480 Family Law 3 credits (I)

This course begins with an overview of divorce law and reviews important aspects to consider in property division, alimony, custody and support in a divorce. Other aspects of the course include prenuptial agreements, adoptions, and paternity actions. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1490 Alternative Dispute Resolution: Mediation 3 credits (I)

Students will learn negotiation skills and how to select the most cost-effective and least intrusive alternative dispute resolution method to achieve the most positive result for both parties. Students will understand the processes and methods of alternative dispute resolution techniques, learn the proper application and limits of alternative dispute resolution techniques, appreciate the ethical consideration involved, and develop a basic ability to apply the methods. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1500 Victim Advocacy 3 credits (I)

This course focuses on victim advocacy arenas such as domestic violence shelters, crisis centers, crisis hotlines and the criminal justice system. Course topics include legal terminology, legal process, legislation regarding victim's rights, jurisdiction and venue, ethics, effects of victimization on the victim, victim advocate skills, guardianships and crisis intervention. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST1510 Bankruptcy Law 3 credits (I)

This course is designed to introduce paralegal students to the complexities of bankruptcy law to help train them to work as paralegals in the area of bankruptcy. It also provides paralegals working in other areas of law with the knowledge they may need to assist their attorney with clients who receive notice of bankruptcy. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST 1520 Real Property 3 credits (I)

This course examines the basic principles in the law of real property. Students will explore topics in the ownership and transfer of real property interests, including parties to a real estate transaction, the sales agreement surveys, deeds, leases, deeds of trust, mortgages. The course stresses the understanding and preparation of legal instruments necessary for a real estate closing. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

LGST 1530 Torts & Personal Injury 3 credits (I)

A review of the general nature of tort law covering intentional torts, negligence, appropriate standards of conduct, product liability law, tort immunities, and medical malpractice. Specific attention is given to the nature of personal injury litigation documentation, investigation, and practices, including the evaluation of claims for damages and the formalities of adjudication and settlement. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

Mass Communications

MACO1200 Introduction to Media: The Genres of Journalism 3 credits (I)

The functions and criticism of the media with emphasis on basic journalism (reporting, interviewing, news writing and layout) as it relates to television, newspapers and magazines. MTC goal areas: (2) Critical Thinking and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

MACO1205 Introduction to Media: Journalistic Perspectives 3 credits (I)

The examination of basic journalism theories and regulations as they apply to writing articles, editorials and commercials, and layouts as they relate to the various media. MTC goal areas: (2) Critical Thinking and (9) Ethic and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

MACO2999 Special Topics in Mass Communications 1-3 credits (I)

Study of special topics in mass communications. Special course topics will be announced in the class schedule.

Math**MATH0450 Pre-Algebra** 4 credits(F/S)

This course covers whole numbers, fractions, decimals, ratio/proportions, percent, U.S. and metric measure, signed numbers, algebraic expressions, linear equations, applied geometry, and exponents. (Prerequisites: Appropriate placement test score) (4 hrs lec/0 hrs lab/0 hrs OJT)

MATH0451 Pre-Algebra for Health Careers 4 credits(F/S)

This course covers whole numbers, fractions, decimals, ratio/proportions, percent, U.S. and metric measure, signed numbers, algebraic expressions, linear equations, applied geometry, exponents, and applications for health care in apothecaries measurements and medication calculations. (Prerequisites: Appropriate placement test score.) (4 hrs lec/0 hrs lab/0 hrs OJT)

MATH0460 Algebra I 3 credits(F/S)

This course covers solving elementary equations and inequalities, graphing, solutions for systems of equations, polynomials, factoring, rational expressions, and applications. (Prerequisites: MATH0450, MATH0451, MATH1531 or appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH0470 Algebra II 3 credits(F/S)

This course covers operations with radical and rational expressions, solutions for equations containing radicals, solutions for equations containing rational expressions and quadratics, graphs of linear equations and conic sections, solutions for systems of linear equations, graphs of linear and nonlinear inequalities, and functions. (Prerequisites: MATH0460 or equivalent or appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH0480 Algebra Introductory and Intermediate 5 credits(F/S)

This course covers solving elementary equations and inequalities, graphing, system of equations, polynomials, factoring, rational expressions, rational equations, radical expressions, complex numbers, radical equations, quadratic equations, functions, conic sections, and applications. (Prerequisites: MATH0450, MATH0451, MATH1531 with a grade of "C" or better or appropriate score on the placement test.) (5 hrs lec/0 hrs lab/0 hrs OJT) NOTE: MATH0460 and MATH0470 taken in sequence are the equivalent of MATH0480.

MATH0552 Refresher/Pre-Algebra 1 credit (I)

This course is a refresher of whole numbers, fractions, decimals, ratio/proportions, percent U.S. and metric measure, signed numbers, algebraic expressions, linear equations, applied geometry, and exponents. It is designed to reinforce basic math skills for students that have tested into Pre-Algebra on the Placement Test, but have completed a higher level math course in recent years. This course is not equivalent to Pre-Algebra, it is only a preparation to retake the College Placement Test. (Prerequisites: Algebra I or higher in high school (with a B Average Grade) and a Math Placement score of 40 or below) (1 hr lec/0 hrs lab/0 hrs OJT)

MATH1012 Mathematics for Elementary Teachers I 3 credits (F)

This course meets the fundamental topics in arithmetic competencies. These topics include addition, subtraction, multiplication and division of whole numbers, number theory related to fractions, decimals and integers. The use of mathematics manipulatives for modeling the basic operations will be emphasized. This course provides instructional theory and techniques for the teaching of mathematics at the elementary level. Its purpose is to teach prospective elementary teachers how to teach mathematics. (Prerequisites:   Pre-education major.) (3 hrs lec/0 hrs lab/0 hrs OJT).

MATH1014 Mathematics for Elementary Teachers II 3 credits (S)

This course meets the introduction to higher mathematic competencies. These topics include geometry, discrete mathematics, probability, and statistics. This is the second of two mathematics courses providing the background for teaching in the elementary school. The use of mathematics manipulatives for modeling the basic operations will be emphasized. (Prerequisites:  , MATH1012, Pre-education major.) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1100 College Algebra 4 credits(F/S)

The study of functions, theory of equations, inequalities, exponential and logarithmic functions, conic sections, and selected topics from advanced algebra. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH0470 or MATH0480 or appropriate placement test score) (4 hrs lec/0 hrs lab/0 hrs OJT)

MATH1105 Principles of Mathematics 3 credits(F/S)

Problem solving, numeration methods and mathematical systems, sets, symbolic logic, probability and statistics, and applications of mathematics. For all students in a liberal education program. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH0460 with a "C" or better or appropriate score on the placement test) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1110 Finite Mathematics 3 credits(Arr)

System of linear equations, matrixes, linear programming, probability, statistics, and applications. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH0470 or appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1115 Contemporary Discrete Mathematics
4 credits (F/S)

Foundations of discrete mathematics. Sets, sequences, number theory and base conversion, functions, big-O, propositional and predicate logic, Boolean algebra, proof methods, mathematical induction, counting methods and combinatorics, recursion and recurrences, relations, trees/graph fundamentals. MTC Goals: Mathematics/Symbolic Systems and Critical Thinking. (Prerequisites: MATH 0470 or equivalent) (4 hrs lec/0 hrs lab/0 hrs OJT).

MATH1120 Survey of Calculus 3 credits (Arr)

This course covers some of the topics of calculus important for business applications. Topics studied include: functions, limits, derivatives, techniques of differentiation, applications of derivative, the integral, techniques of integration, differentiation, and integration of logarithmic and exponential functions. Many different applications in business fields are covered. This course is not a substitute for Calculus I and is primarily taken by students pursuing business or accounting majors. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH1100 or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1130 Trigonometry 3 credits (F/S)

Angles, circular functions, identities, right triangles, Law of Sines, Law of Cosines, trigonometric equations, vectors, trigonometric form of complex numbers, and applications. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH1100 or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1150 Pre-Calculus 5 credits (F/S)

This course covers algebraic operations, functions, theory of equations, inequalities, absolute value graphing, logarithmic, exponentials, and analytic trigonometry. It is intended to be taken as a review course covering topics of both College Algebra and Trigonometry and will move quickly through the topics. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH0470 or equivalent) (4 hrs lec/0 hrs lab/0 hrs OJT)

Note: MATH1100 and MATH1130 taken in sequence are the equivalent of MATH1150.

MATH1440 Occupational Math/Transportation
1 credit (F)

This course covers decimals, fractions, percentages, signed numbers, ratios, and proportions as it applies to the automotive and diesel trades. (1 hr lec/0 hrs lab/0 hrs OJT)

MATH1500 Applied Algebra and Trigonometry
4 credits

This course covers a review of the basics in applied algebra, geometry, and trigonometry. The course will give the student the tools needed to be successful in some technical programs at Lake Superior College. (Prerequisites: None) (4 hours lec/0 hrs lab/0 hrs OJT)

MATH1521 Calculator Technology (TI-30)
1 credit (Arr)

This course provides an opportunity for students to learn to operate a scientific calculator and to improve math skills with technology. The student will unlock new methods of solving equations, graphing, and problem solving

with the use of the "super" calculators. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MATH1522 Calculator Technology (TI-85)
1 credit (Arr)

This course provides an opportunity for students to learn to operate a scientific calculator and to improve math skills with technology. The student will unlock new methods of solving equations, graphing, and problem solving with the use of the "super" calculators. (Prerequisites: MATH0460 or MATH1531) (1 hr lec/0 hrs lab/0 hrs OJT)

MATH1531 Technical Math I 3 credits (F/S)

This course covers Algebra, Geometry, and Trigonometry and gives students the tools needed to be successful in technical courses at Lake Superior College. (Prerequisites: MATH0450 or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1532 Technical Math II 3 credits (F/S)

This course is a continuation of Technical Mathematics I incorporating higher level problems, focusing on engineering applications. (Prerequisites: MATH1531) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH1535 Applied Geometry for Technicians
2 credits (S)

This course covers applied geometry concepts as they relate to the design and manufacturing of machine parts. (Prerequisites: MATH1531) (2 hrs lec/0 hrs lab/0 hrs OJT)

MATH1733 Advanced Tech Math 5 credits (Arr)

This course is designed to provide students with the mathematical skills needed for success in technical programs. A thorough presentation of Algebra, Geometry, and Trigonometry is included with applications. The concepts and relationships are presented at an accelerated pace. (Prerequisites: MATH0450 or equivalent) (5 hrs lec/0 hrs lab/0 hrs OJT)

MATH2204 Calculus I 5 credits (F/S)

The first course in single variable calculus. Topics include limits, continuity, fundamentals of differentiation, differentiation of trigonometric functions, application of derivatives, indefinite and definite integrals, calculus of exponential and logarithmic functions, calculus of trigonometric and inverse trigonometric functions, and hyperbolic functions. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning (Prerequisites: MATH1100 and MATH1130 or MATH1150) (5 hrs lec/0 hrs lab/0 hrs OJT)

MATH2205 Calculus II 5 credits (S)

The second course in single variable calculus. Topics include techniques of integration, applications of integration, indeterminate forms, improper integral, infinite series, analytic geometry, polar coordinates, and parametric equations. MTC goal areas: (2) Critical Thinking, (4) Mathematical/Logical Reasoning. (Prerequisites: MATH2204 or equivalent) (5 hrs lec/0 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

MATH2206 Multi-Variable Calculus 4 credits(Arr)
 This course covers Calculus of vector-valued functions of two or more variables. Topics include line integrals, surface integrals, Green's Theorem, Stokes' Theorem and the Divergence Theorems. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH2205 or equivalent) (4 hrs lec/0 hrs lab/0 hrs OJT)

MATH2210 General Statistics 3 credits(F/S)
 An introductory course in descriptive and inferential statistics for business and pre-professional majors. The following topics will be covered: organizing data, averages and variations around the mean, probability and probability statistics, binomial, normal and sampling distributions, estimations, hypothesis testing, analysis of variance (ANOVA), regression and correlation, and chi-square analysis. MTC goal area: (4) Mathematical/Logical Reasoning. (Prerequisites: MATH0470 or MATH 0480) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH2215 Introduction to Linear Algebra 3 credits (Arr)
 This introductory course in linear algebra focuses on linear systems, linear transformations, matrices, vectors, determinants, linear dependence and independence, dimension and rank, and an introduction to vector spaces. MTC goal areas: (2) Critical Thinking and (4) Mathematical/Logical Reasoning. (Prerequisites: MATH2204 or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MATH2220 Differential Equations 4 credits (F)
 This course covers introduction to matrix algebra, eigen values, first and second order differential equations, higher order differential equations, Laplace transforms, systems of differential equations, numerical methods, and mathematical models. MTC goal area: (4) Mathematical/ Logical Reasoning) (Prerequisites: MATH2205) (4 hrs lec/0 hrs lab/0 hrs OJT)

MATH2999 Special Topics in Math 1-3 credits (I)
 Study of special topics in math. Special course topics will be announced in the class schedule.

Multi-Cultural Studies

MCS2020 Multi-Cultural Studies/Community Service 2 credits(F/S)
 Tutoring and mentoring experience for students interested in community service. Students will gain valuable experience in elementary/secondary schools and community sites tutoring/mentoring students of color. A weekly seminar for reflection and learning is required. (Prerequisites: Instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

MCS2301 Study Abroad: Travels in Europe 1-3 credits(S)
 This course is a study abroad experience with a concentration on the history, religion, and culture of selected European countries through visits to historical sites, art centers, churches and villages. The classroom portion, prior to departure, provides a core foundation on the dynamics of Intercultural Communication and also includes research, study, lecture, and classroom discussion. The travel segment which follows includes lectures by native guides who provide the background necessary to

enable students to envision centuries of history and ancient civilizations. The guides provide an insider's look at the history, cultural trends and unique stories of a locale, and will establish a frame of reference for the class research and the travel experience. MTC goal areas: (2) Critical Thinking, (7) Human Diversity, and (8) Global Perspective. (Prerequisites:   and at least 18 years of age. See instructor regarding selection criteria) (1-3 hrs lec/0 hrs lab/0 hrs OJT)

MCS2999 Special Topics in Multicultural Studies 1-3 credits (I)
 Study of special topics in multicultural studies. Special course topics will be announced in the class schedule.

Medical Assistant

MEDA1400 Medical Assistant Clinical Procedures I 2 credits (S)
 This course introduces the Medical Assistant student to clinical client care concepts and skills used in the medical office setting. This course includes the study of the role of the medical assistant, client developmental stages, body mechanics, safe client handling and positioning, instrument sterilization, introduction to pharmacology, vital signs, aseptic technique and obtaining a medical history. (Prerequisites: BIOL1000, ALTH1410, MLTN1402 or instructor consent) (1 hr lec/2 hrs lab/0 hrs OJT)

MEDA1402 Medical Assistant Clinical Procedures II 4 credits (S)
 This course builds on skills introduced in Medical Assistant Clinical Procedures I and includes pharmacology, nutrition, electrocardiography, minor surgical procedures and assisting physicians with physical examinations of adults and children. This course prepares students for clinical internships in the areas of assisting and professionalism. (Prerequisites: MEDA1400) (2 hrs lec/4 hrs lab/0 hrs OJT)

MEDA1405 Medical Assistant Administrative Procedures 3 credits (F)
 This course introduces the student to the administrative skills routinely performed by the medical assistant in an ambulatory care setting. Students will cover skills in the areas of clerical functions, basic bookkeeping, special accounting entries, basic office transcription, and insurance claims. (Prerequisites: ADSC1715 or consent of instructor) (2 hrs lec/2 hrs lab/0 hrs OJT)

MEDA2417 Medical Assistant Internship 4 credits (F)
 This course provides the opportunity for the student to apply the knowledge, skills and attitudes learned throughout the Medical Assistant Program in a medical clinic setting. (Prerequisites: Successful completion of all program academic course work, completed medical history and physical, current immunizations and background check) (0 hrs lec/0 hrs lab/12 hrs OJT)

<p>Term Course Codes: (F) = Fall Semester (S) = Spring Semester (F/S) = Fall & Spring Semesters (I) = Intermittent (Arr) = Arranged</p>

MEDA2999 Special Topics in Medical Assistant
1-3 credits (I)
Study of special topics in medical assistant. Special course topics will be announced in the class schedule.

Sales and Marketing

MKTG1001, 1002, 1003, & 1004
Leadership Development 1 credit (F/S)
These courses are designed to provide the student with "hands-on" experience in self-development through undertaking active leadership roles, observing others in leadership situations, and participating in service learning activities. Four courses, one each semester, are offered. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MKTG1005 Customer Service Skills 3 credits (F/S)
This course examines customer service issues such as maintaining a competitive awareness, cultivating a sense of ethics, professional telephone and e-mail usage, dealing with controversy, and understanding cultural diversity as they apply to a customer service driven organization. (2 hrs lec/2 hrs lab/0 hrs OJT).

MKTG1411 Sales Techniques and Applications
4 credits (F)
This course is designed to provide the student with an overview of basic selling techniques and the opportunity to apply these techniques through role-play presentations. (Prerequisites: None) (3 hrs lec/2 hrs lab/0 hrs OJT)

MKTG1421 Principles of Marketing 3 credits (F/S)
This course is designed to provide the student with an overview of basic marketing principles and practices, centering on the components of the marketing mix and the contribution each component makes toward the overall marketing effort of large and small businesses and organizations. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

MKTG1431 Marketing Financial Techniques
3 credits (S)
This course presents the student with basic business computation skills especially as they relate to marketing. (Prerequisites: MATH0450) (1 hr lec/4 hrs lab/0 hrs OJT)

MKTG1512 Consultative and Negotiation Selling Techniques 3 credits (S)
This course is designed to provide the student with advanced selling techniques including consultative and negotiation strategies. Students will have the opportunity to apply these techniques through role-play presentations. (Prerequisites: MKTG1411 or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

MKTG1520 Introduction to Internet Marketing 3 credits (S)
This course is intended to give an overview of the principles and techniques employed in Internet marketing efforts of both large and small organizations toward both business-to-business clients and retail consumers. (Prerequisites: MKTG1421 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MKTG2422 Marketing Applications 3 credits (S)
This course will address the application of various marketing principles through the analysis of the marketing efforts

of an organization and the creation of a marketing plan. (Prerequisites: MKTG1421) (2 hrs lec/2 hrs lab/0 hrs OJT)

MKTG2626 Retail Principles and Management 3 credits (F)
This course is designed to give students an overview of the variety of functions found within retail outlets and the management of these functions. Topics include current retailing terminology, present practices in retailing and retail management, and future trends in retailing. (Prerequisites: MKTG1431) (3 hrs lec/0 hrs lab/0 hrs OJT)

MKTG2653 Sales Management 3 credits (F)
This course is designed to provide the student with an overview of sales management techniques, principles, and trends. (Prerequisites: MKTG1411 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

MKTG2760 Advertising/Sales Promotion 3 credits (S)
This course covers the fundamentals of advertising and sales promotion, the types of promotion tools available, and effective use of those tools. The course focuses on current advertising, use of media, and some of their creative aspects. (Prerequisites: MKTG1421 or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

MKTG2770 Principles of Management and Supervision 3 credits (S)
This course is designed to provide the student with an overview of basic and current management principles and practices. The course addresses managerial functions ranging from front-line supervisor positions to upper management levels. Trends in quality orientation, team building, and leadership are also included. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

MKTG2797 Sales and Marketing Internship 4 credits (F/S)
This course is intended to give students a "hands-on" experience in a marketing position that approximates their employment objective. (Prerequisites: 2.0 GPA and instructor's consent) (0 hrs lec/0 hrs lab/12 hrs OJT)

MKTG2999 Special Topics in Sales and Marketing 1-3 credits (I)
Study of special topics in sales and marketing. Special course topics will be announced in the class schedule.

Medical Laboratory Technician

MLTN1402 Basic Skills for Laboratory Personnel 4 credits (F/S)
This course will introduce Medical Laboratory Technician (MLT) and Phlebotomy students to the medical laboratory profession. Fundamental concepts and skills used in Clinical Chemistry, Hematology, Urinalysis, Coagulation, Blood Bank, Serology, and Microbiology will be developed. An overview of other allied health occupations, safety, ethics, professionalism, quality control, equipment, and specimen collection and preparation will be included. (Prerequisites: Admission to the MLT or Phlebotomy program or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

MLTN1410 Immunology & Serology 3 credits (F)
 This course will provide the Medical Laboratory Technician student with a basic foundation in the processes by which all living organisms defend themselves against infection and disease (i.e., Immunity). The Serology portion of the course will study the noncellular components of the blood which react in response to these specific infections and diseases. (Prerequisites: Admission to the MLT Program or instructor's consent) (2.5 hrs lec/1 hr lab/0 hrs OJT)

MLTN1452 Medical Laboratory Procedures I 2 credits (S)
 This course is an introduction to basic clinical hematology and urinalysis principles and procedures for Medical Assistant students. (Prerequisites: Completion of MLTN1402 and enrollment in the Medical Assistant program) (1 hr lec/2 hrs lab/0 hrs OJT)

MLTN1460 Laboratory Mathematics & Solutions 1 credit (F)
 This course will develop the essential basic math skills needed for performing the calculations used in the clinical and biological laboratories. Chemical and physical principles used in laboratory procedures will be correlated with the mathematical concepts and applied to clinical conditions and situations. (Prerequisites: MATH1420 or MATH0460 and MLTN1402 or instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

MLTN1510 Clinical Blood Banking 3 credits (F)
 This course will encompass the theoretical concepts, clinical practices, and techniques associated with modern transfusion therapy. Donor blood collection and processing, the erythrocyte blood group systems, transfusion practices, clinical conditions associated with immunohematology and blood banking procedures will be learned. (Prerequisites: MLTN1410 or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

MLTN1522 Medical Laboratory Procedures II 2 credits (S)
 This course is an introduction to basic medical microbiology principles and procedures and specialty laboratory testing for Medical Assistant program students. (Prerequisites: Completion of MLTN1402 and enrollment in the Medical Assistant program)

MLTN1523 Clinical Microbiology 4 credits (F)
 This course will cover factual material on bacteria genera, culture techniques and identification procedures. Models will be developed for clinically significant bacteria categories. In addition, an overview of virology will be presented. (Prerequisites: MLTN1402 or instructor's consent) (2 hrs lec/4 hrs lab/0 hrs OJT)

MLTN1524 Parasitology/Mycology 1 credit (F)
 This course will introduce students to the study of medically significant parasites and fungi and the infections associated with their presence in the human body. Methods and techniques used for diagnosis and identification of these organisms will be studied. Treatment and controls of the diseases will be discussed. (Prerequisites: MLTN1523 or instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

MLTN1572 Phlebotomy Skills for Health Professionals 1 credit (F)
 This course is designed to teach health care providers about the equipment, safe and effective procedures and skills necessary to collect blood from patients. (Prerequisites: Enrollment in the Medical Laboratory Technician program or instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

MLTN1574 Collection Procedures and Skills for Phlebotomists 2 credits (F/S)
 This course will teach students enrolled in the Phlebotomy program information about their role in health care. Procedures, skills and equipment needed for the provision of safe and effective collection of patient specimens will be taught. (Prerequisites: Enrollment in the Phlebotomy program or instructor's consent) (1 hrs lec/2 hrs lab/0 hrs OJT)

MLTN2402 Clinical Simulations 3 credits (F)
 This Capstone course reviews previously learned Medical Laboratory Technician knowledge, laboratory techniques, and skills. The students are provided simulated clinical laboratory specimens for analysis; requisitions and results to evaluate, interpret and correlate with disease processes; and problem-solving situations in which they can apply their knowledge and skills. (Prerequisites: Satisfactory completion of all first year Medical Laboratory Technician courses or instructor's consent) (0 hrs lec/6 hrs lab/0 hrs OJT)

MLTN2441 Clinical Chemistry I 3 credits (S)
 This course will cover the principles, procedures and correlations of clinical chemistry. Blood and other body fluids will be studied and analyzed. Emphasis will be placed on routine chemistry laboratory methods, techniques, and quality control. (Prerequisites: Completion of MLTN1402, or instructor's consent. Completion of CHEM1110 and CHEM1310 is highly recommended) (2 hrs lec/2 hrs lab/0 hrs OJT)

MLTN2442 Clinical Chemistry II 2 credit (F)
 This course will cover additional principles, procedures and correlations of clinical chemistry. Blood and other body fluids will be studied and analyzed. Emphasis will be on specialized chemistry methods, techniques and quality control. (Prerequisites: Completion of MLTN2441 or instructor's consent) (1 hr lec/2 hr lab/0 hrs OJT)

MLTN2450 Clinical Hematology 5 credits (F)
 This course will cover the theoretical concepts, clinical skills and techniques of hematology. Blood and its cellular components will be studied and related to disease processes and clinical disorders. Manual and automated laboratory methods will be taught. (Prerequisites: Completion of MLTN1402 or instructor's consent) (3 hrs lec/4 hrs lab/0 hrs OJT)

MLTN2470 Laboratory Instrumentation 1 credit (S)
 This course will provide the student with a broad-based understanding of clinical laboratory instrumentation principles and applications. Selection, maintenance, troubleshooting and quality assurance issues will be included. (Prerequisites: Concurrent enrollment in the clinical internships of the Medical Laboratory Technician program, or the instructor's consent) (.5 hr lec/1 hr lab/0 hrs OJT)

MLTN2500 Medical Laboratory Technician Seminar 2 credits (S)

This course will provide students with the opportunity to (1) engage in exploration of new laboratory topics, (2) investigate case studies seen in their internship, (3) share information and experiences gained in their internships, and (4) participate in continuing education classes provided by other health care professionals. (Prerequisites: Enrollment in the internship portion of the Medical Laboratory Technician program [Semester V] or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

MLTN2517 Internship-Blood Banking & Serology 3 credits (S)

This internship will provide the student with basic clinical experiences in the Blood Bank, Immunology, and Serology departments of an approved health care facility. The academic and practical instruction received at the college will be applied to the clinical setting. (Prerequisites: Completion of MLTN1410, MLTN1510, and MLTN2402 or instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

MLTN2527 Internship-Microbiology 3 credits (S)

This internship will provide the student with basic clinical experiences in the Microbiology department of an approved health care facility. The academic and practical instruction received at the college will be applied to the clinical setting. (Prerequisites: Completion of MLTN1523 and MLTN2402 or instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

MLTN2530 Urinalysis & Coagulation 2 credits (S)

This course will present the fundamental principles of urine and body fluids (i.e., Cerebral Spinal Fluid, Gastrics, Feces, Pleural, Peritoneal, Pericardial, etc.) analysis as well as the principles involved in the process of hemostasis, or coagulation. The anatomy, physiology, and chemistry of each system will be correlated with the respective analysis results and the clinical conditions. (Prerequisites: MLTN1402 or instructor's consent) (1 hr lec/2 hrs lab/0 hrs OJT)

MLTN2537 Internship-Urology 1 credit (S)

This internship provides the student with basic clinical experiences in the Urology department of an approved health care facility. The academic and practical instruction in Urinalysis & Body Fluids will be applied to the clinical setting. (Prerequisites: Completion of MLTN2402 and MLTN2530 or instructor's consent) (0 hrs lec/0 hrs lab/3 hrs OJT)

MLTN2547 Internship-Chemistry 3 credits (S)

This internship will provide the student with basic clinical experiences in the Chemistry department of an approved health care facility. The academic and practical instruction received at the college will be applied to the clinical setting. (Prerequisites: Completion of MLTN2402 and MLTN2442 or instructor's consent) (0 hrs lec/0 hrs lab/9 hrs OJT)

MLTN2557 Internship-Hematology 2 credits (S)

This internship will provide the student with basic clinical experiences in the Hematology department of an approved health care facility. The academic and practical instruction received at the college will be applied to the clinical setting. (Prerequisites: Completion of MLTN2402 and MLTN2450 or instructor's consent) (0 hrs lec/0 hrs lab/6 hrs OJT)

MLTN2567 Internship-Coagulation 1 credit (S)

This internship will provide the student with basic clinical experiences in the Coagulation department of an approved health care facility. The academic and practical instruction received at the college will be applied to the clinical setting. (Prerequisites: Completion of MLTN2402 and MLTN2530 or instructor's consent) (0 hrs lec/0 hrs lab/3 hrs OJT)

MLTN2577 Internship-Phlebotomy & Associated Procedures 1 credit (S)

This internship will provide the student with basic clinical experiences in the Phlebotomy department of an approved health care facility. The academic and practical instruction in Phlebotomy and associated techniques received at the college will be applied to the clinical setting. (Prerequisites: Completion of or concurrent enrollment in MLTN1402, MLTN1572, and MLTN1574, or instructor's consent) (0 hrs lec/0 hrs lab/3 hrs OJT)

MLTN2999 Special Topics in Medical Laboratory Technician 1-3 credits (I)

Study of special topics in medical laboratory technician. Special course topics will be announced in the class schedule.

Machine Tool Careers

MTCC1400 Blue Print Reading I 2 credits (F/S)

This course covers basic blueprint reading principles. Topics included are lines, views, one and two view drawings, scaling, dimensioning, tolerancing, symbols, and sketching. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

MTCC1405 Professional Development 1 credit (F/S)

This course covers topics that build awareness of issues important to Machine Trade Industry. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCC1410 Machine Shop Safety & Power Saws 1 credit (F/S)

This course covers safety procedures and hazards in the machine trade and the use of power saws. Topics include use of safety glasses and safety procedures for all machine tools. Basic use of all saws and different blades. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

MTCC1420 Bench Work, Math, & Measurement (1 credit) (F/S)

This course covers applied mathematical calculation dealing with measurement and gauging tools, basic, layout, and bench work using hand tools. Topics include safety, hand tool identification, use of hand tools, micrometers, depth gauges, indicator, and gauge blocks. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

MTCC1430 Basic Engine Lathes I 3 credits (F/S)

This course covers basic lathe operation in a laboratory setting. Topics include safety, turning, facing, parting, knurling, threading, boring, and tool sharpening. (Prerequisites: MTCC1410) (0 hrs lec/6 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

MTCC1440 Vertical Milling Machines I 3 credits (F/S)

This course covers the basic principles of vertical milling machine operations, including safety, set up, selection of tooling, and use of milling attachments. (Prerequisites: None) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC1450 Engine Lathe II 3 credits (F/S)

This course covers advanced lathe operation in a laboratory setting. Topics include using soft jaws, drilling, tapping, reaming acme threading, carbide tool sharpening, turning, and boring. (Prerequisites: MTCC1410 and MTCC1430) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC1460 Blueprint Reading II 2 credits (S)

This course covers advanced blueprint reading. Welding, geometric tolerancing and dimensioning (gd&t) are covered. (Prerequisites: MTCC1400) (2 hrs lec/0 hrs lab/0 hrs OJT)

MTCC1470 Industrial Machinery's Handbook 1 credit (F)

This course covers the use of the Industrial Machinery's Handbook. Machine trade problems that can be solved by using the handbook will be given. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCC1500 Horizontal Milling Machines 1 credit (F/S)

This course covers the principle of horizontal milling machine operation. Topics included will be safety, set up, tool selection, speed and feed, and the use of milling attachment. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/2 hrs lab/0 hrs OJT)

MTCC1505 Surface Grinder I 2 credits (F/S)

This course covers surface grinding for squareness, flatness, and other grinding operations. Grinding wheel selection, dressing wheels, set ups, and safety aspect will be covered. (Prerequisites: MTCC1410) (0 hrs lec/4 hrs lab/0 hrs OJT)

MTCC1510 Heat Treating 1 credit (S)

This course covers heat treating concepts, procedures, and methods with hands-on experiences performing various heat treating procedures. Machineability and identification of ferrous and non-ferrous materials is covered with hands-on experiences machining various materials. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCC1520 Cylindrical Grinding 1 credit (F/S)

This course covers the basic cylindrical grinding principles. Topics included are safety, set up, grinding wheels, and operating the grinder. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/2 hrs lab/0 hrs OJT)

MTCC2400 Vertical Milling Machines II 3 credits (F/S)

This course covers advanced milling machines operations. Topics included are safety, selection of tooling, and advanced use of attachments and set ups. (Prerequisites: MTCC1440) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2410 Basic CAD 2 credits (F/S)

This course covers basic CAD principles of Cadkey. Topics included are keyboarding, 2D and 3D drawings, save drawings to A and C drives, and plotting. (Prerequisites: MTCC1400) (0 hrs lec/4 hrs lab/0 hrs OJT)

MTCC2420 Handscrew Machine 1 credit (F/S)

This course covers production turning on a Handscrew Machine. Topics include the use of carbide tooling, drill, tapes, knurling, facing, and cutoff tools. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/2 hrs lab/0 hrs OJT)

MTCC2430 Inspection & Geometric Tolerancing 3 credits (F/S)

This course focuses on the use of inspection equipment and checking parts with that equipment, geometric tolerancing and dimensioning (gd&t) is covered and is a certified course. Statistical process control (spc) is also covered. (Prerequisites: MTCC1420) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2440 CNC Basic Programming 1 credit (F/S)

This course focuses on both turning and machining center programming for Computer Numerical Control (CNC). Basic CNC concepts will be covered in depth. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCC2450 Estimating & Processing 1 credit (F/S)

This course covers estimating the cost of manufacturing parts. Topics include material, overhead, wages, and machine cost. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCC2460 Tool & Cutter Grinding 2 credits (F/S)

This course covers tool and cutter grinding operations. Sharpening of two and four end mills, horizontal cutters, and special cutters will be covered. (Prerequisites: None) (0 hrs/4 hrs lab/0 hrs OJT)

MTCC2470 Basic CAM 3 credits (F/S)

This course covers Computer Aided Manufacturing (CAM), operation and programming. (Prerequisites: MTCC2410) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2500 CNC Mill (Conversational) 3 credits (F/S)

This course covers conversational and G code programming and operation of CNC milling machine. Topics covered are speed and feeds, tooling, programming, set up, and operation of CNC mill. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2510 CNC Turning/Slant 3 credits (F/S)

This course covers CNC programming, set up, and operation of a CNC turning center with Fanuc controller. Topics include speed and feeds, drilling, turning, facing, threading, and boring. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2530 Jig & Fixture Construction 2 credits (S)

This course covers basic principles of building fixtures or jigs from blueprints and drawing or parts. (Prerequisites: MTCC1410) (0 hrs lec/4 hrs lab/0 hrs OJT)

MTCC2540 CNC Machine Center (3 Axis) 3 credits (F/S)

This course covers advanced CNC milling operations and programming in a lab setting. Topics covered include advanced programming techniques, with auto tool changing. (Prerequisites: MTCC2400) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2550 CNC Turning/Kit 3 credits(F/S)

This course covers CNC programming, set up, and operation of a gang type turning center. Topics include speed and feeds drilling, turning, facing, threading, and boring with a gang type tool holder. (Prerequisites: MTCC1400 and MTCC1410) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2560 Advanced CNC Mill (4th Axis) 4 credits(F/S)

This course covers advanced operation and programming of a vertical four axis machining center. Topics include speed and feeds, milling, drilling, tapping, and programming in one to four axes in vertical setting. (Prerequisites: MTCC1400, MTCC1410) (0 hrs lec, 8 hrs lab, 0 hrs OJT)

MTCC2570 Wire EDM 3 credits(F/S)

This course covers the set-up, programming, and operation of the Wire EDM. (Prerequisites: MTCC2520) (0 hrs lec/6 hrs lab/0 hrs OJT)

MTCC2579 Special Topics (F/S) 1-6 credits

This course covers special or advanced topics. Topics are arranged with an instructor specializing in that area. The machine or lab must have space available. Regular or full-time students have priority on classes. (Prerequisites: Must have basic knowledge of the area of study)

MTCC2999 Special Topics in Machine Tool Careers 1-3 credits (I)

Study of special topics in machine tool careers. Special course topics will be announced in the class schedule.

MTCM2400 Mold Construction 1 credit (F)

This course presents the process required to design and building a complete mold in a classroom setting. Plastic types and characteristics, metal alloy casting types and characteristics, design principles, and molding methods are covered. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MTCM2410 Mold Building I 4 credits (F/S)

This course begins construction of a plastic injection mold. Roughing out the A & B plates and the ejection system will be completed during this course. (Prerequisites: MTCM2400) (0 hrs lec/8 hrs lab/0 hrs OJT)

MTCM2420 Milling Machines III & Opticdress 2 credits(F/S)

This course covers the set up and operation of the cross slide rotary table on a vertical mill and milling a blind pocket. Also, setting up and operating the optic dresser to dress angles and radius on the surface grinder. (Prerequisites: MTCC2400) (0 hrs lec/4 hrs lab/0 hrs OJT)

MTCM2430 Mold Building II 5 credits(F/S)

This course covers the advanced construction of the cavity and core plates for a plastic injection mold. EDM, CNCs, mill lathes, and grinders are used to complete the mold set. Test of the mold will be completed by running the mold in an injection press. (Prerequisites: MTCM2410) (0 hrs lec/10 hrs lab/0 hrs OJT)

Massage Therapy**MTP1000 Massage Therapy Human Anatomy and Physiology 3 credits (F)**

The study of the structure and function of human organ systems as they apply to the service of massage therapy. This course is presented simultaneously with MTP1010 as a complement to the hands on learning in MTP1010. All organ systems are covered with special emphasis on the muscular, skeletal, lymphatic and integumentary systems. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

MTP1002 Massage Therapy Kinesiology 1 credits (F)

This course covers the basic structure and function of the joints, muscles, nerves, and other connective tissues that cause movement and control posture in the human body as they apply to massage therapy. General physics principles including levers, planes and axis, are covered. The interactions of the muscle/bone connections and the forces needed to produce movement are taught. Postural analysis is integrated into this course. Therapeutic massage interventions are discussed, demonstrated and practiced. (Prerequisites:  ) (1 hr lec/0 hrs lab/0 hrs OJT)

MTP1004 Massage Therapy Pathology 2 credits (F)

This course covers the basic pathophysiology of the major body systems and organs as they apply to massage therapy. Mental health is also discussed in relationship to appropriate care by the massage therapist. Universal precautions are covered. The role of a massage therapist involved with the care of clients who may have common diseases are covered. Systemic contraindications, local contraindications and cautions that influence massage are covered. (Prerequisites:  ) Acceptance into Massage Therapist program) (2 hrs lec/0 hrs lab/0 hrs OJT)

MTP1006 Issues in Massage Therapy Practice 2 credits (F)

Professional behavior and standards, ethical and legal practice as it applies to massage therapy. How to manage time and communicate professionally. Appropriate responses to client behaviors. Didactic and role playing, and documentation are covered. Licensure, national certification, professional organizations, malpractice insurance, sexuality, cultural diversity, and the hospice concept are taught. (Prerequisites:  ) Acceptance into Massage Therapist program) (2 hrs lec/0 hrs lab/0 hrs OJT)

MTP1008 Massage Therapy Procedures I 2 credits (F)

Client positioning, with the use of the bolsters, pillows, and special tilt, cut-out and firm massage tables. Use of hot packs (superficial heat) and cold packs or ice (cryotherapy). The ability to make professional judgments about the application of the appropriate modality for each client situation. (Prerequisites:  ) Acceptance into Massage Therapist program) (1 hr lec/2 hrs lab/0 hrs OJT)

Term Course Codes:

(F) = Fall Semester
(S) = Spring Semester
(F/S) = Fall & Spring Semesters
(I) = Intermittent
(Arr) = Arranged

MTP1010 Full Body Stress Reduction Massage
4 credits (F)

Massage techniques are applied sequentially to the back, neck and head, posterior legs, anterior torso, face, and anterior legs. Pathology of each area is discussed including function, positioning, appropriate strokes, ethical situations, and the appropriate draping. Concurrently the students are gradually led to the application of professionalism, legal issues, and documentation as they apply to stress reduction massage. (Prerequisites:  ) Acceptance into Massage Therapist program) (2 hr lec/4 hrs lab/0 hrs OJT)

MTP1012 Functional Somatic Release 2 credits (S)

The relationship of the mind's control of muscles and the resulting posture are taught. Instruction in somatic releases for each body section is practiced. The importance of client education is stressed with the responsibility of the client to participate in their well being. Postural analysis is taught. Students learn definitions, identification and therapeutic interventions of the three major muscular reflexes at stress in humans as described by Dr. Thomas Hanna. Distinguishing chronic muscular pain and postural distortions as caused by structural imbalances vs. functional imbalances is explored. (Prerequisites:  ) Acceptance into Massage Therapist program) (1 hr lec/2 hrs lab/0 hrs OJT)

MTP1014 Deep Tissue and Neuromuscular Massage
3 credits (S)

The theory, techniques and applications of deep tissue therapy are taught including deep work on the muscles and fascia, methods of tension release, and the injury repair process. Techniques to release adhesions, restore circulation, and rehydrate dry, fibrous tissues are covered. Causes of stress are discussed and their relationship to chronic tension as related to Neuromuscular Therapy (NMT). The stress-tension-pain cycle is taught. Deep Tissue (DT) therapy employs friction, pressure and vigorous cross fiber stroking. Expanded and more detailed interview and assessment techniques are reviewed. Factors that influence health vs. illness are taught. The Dysfunction Theory and formation of trigger points with review of muscle cell activity is taught. Joint mobilization and stretching are taught. Discerning the appropriateness for DT/NMT is taught. Students learn in-depth interview skills. Working with pressure scales and the importance of client/therapist communication is covered. Development of treatment plans is taught, and how and when to make a referral. (Prerequisites:  ) Acceptance into Massage Therapist program) (1 hr lec/4 hrs lab/0 hrs OJT)

MTP1016 Special Populations Massage
4 credits (S)

This course covers Swedish Massage, Chair Massage, Mother Massage, Infant Massage, Geriatric (Senior) Massage, and Lymphatic Drainage Massage. The evaluation of special populations is taught. Special massage skills involving positioning, strokes, pathology, documentation, and contraindications and cautions are included. (Prerequisites:  ) Acceptance into Massage Therapist program) (2 hr lec/4 hrs lab/0 hrs OJT)

MTP1018 Awareness and Injury Protection I
3 credits (S)

This course teaches the importance of self-awareness and self-care. Body mechanics are emphasized. Yoga, Tai Chi,

Somatic stretches and relaxation techniques are taught. Discussions of stress causing events are discussed. Students have the opportunity to gain self-knowledge and self-awareness both physically and mentally. This course aims to develop student maturity and self-understanding. (Prerequisites:  ) Acceptance into Massage Therapist program) (2 hrs lec/2 hrs lab/0 hrs OJT)

MTP1022 Massage Therapy Business: Start-up and Management
3 credits (S)

This course covers the principles of a massage therapy business start-up. Development of a business plan, a logo, business cards and brochures is done. The importance of marketing is taught. The statistics of small business successes are taught. The importance of keeping records is covered. The differences between contract working, being an employee and ownership are compared. Topics covered include: goal setting, strategic planning, self management, time management, barriers to success, image, financing, location, setting fees, choosing advisors, retirement planning, policies, marketing and client retention as they relate to massage therapy. (Prerequisites:  ) Acceptance into Massage Therapist program) (3 hrs lec/0 hrs lab/0 hrs OJT)

MTP2999 Special Topics in Massage Therapist
1-3 credits (I)

Study of special topics in massage therapist. Special course topics will be announced in the class schedule.

Music**MUSC1105 America's Music** 3 credits (I)

This course features music by American composers from the Revolutionary War to today. Music genres that will be studied include symphonic, Broadway, folk, jazz and country-western. This class is designed as a fine arts offering and does not require a background in music. Students are expected to attend one music event. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

MUSC1110 Appreciation of Music 3 credits (F)

This course deals with the techniques of listening and of understanding serious music through the study of over 400 years of classical music. It includes the styles of various eras, their composers, and cultural background. This survey course is designed as a fine arts offering and does not require a background in music. Students are expected to attend one music event. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

MUSC1120 Fundamentals of Music 3 credits (S)

This course is directed toward anyone interested in learning how to read music. Topics for study will include: the musical staff, melody writing, major and minor scale construction, intervals and basic chords, rhythmic notation, and elementary keyboard and recorder skills. From the prospective elementary education major to the adult interested in learning how to play the piano, this course is designed for you. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

MUSC1160 Applied Music 1 credit (F/S)
Applied Music courses provide students with private lessons on a musical instrument for thirty minutes each week. Students develop their knowledge of the instrument, their ability to read music, and their attention to technique. This course may be taken for a total of two credits. A personal property fee will be charged in addition to tuition. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (.5 hr lec/0 hrs lab/0 hrs OJT)

MUSC1170 Applied Music-Intensive Study 2 credits (F/S)
This intensive applied music course provides students with private lessons on a musical instrument for sixty minutes each week. Students develop their knowledge of the instrument, their ability to read music, and their attention to technique. This course may be taken for a total of four credits. A personal property fee will be charge in addition to tuition. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

MUSC2999 Special Topics in Music 1-3 credits (I)
Study of special topics in music. Special course topics will be announced in the class schedule.

Nursing

Nursing Assistant

NUNA1400 Introduction to Nursing/Long Term Care 3 credits (F/S)
This course introduces concepts of basic human needs, health/illness continuum and basic nursing skills. It is designed to prepare the student for entry level as a Nursing Assistant and serves as an introduction to the nursing sequence for students who choose to advance in the nursing profession. A physical exam must be completed before registration. Forms are available in Enrollment Services and on the Web site. This course meets the Federal OBRA and Minnesota Department of Health requirements. Successful completion of this course prepares students to take the Minnesota Nursing Assistant Test Out. (Prerequisites: None) (1 hr lec/4 hrs lab/0 hrs OJT)

NUNA1410 Home Health 1 credit (F/S)
This course is designed to instruct students to apply basic nursing principles in caring for the client at home. The course continues from the 84 hour Long-term Nursing Assistant course. Students are prepared for entry-level employment. Successful completion of the State NA Test Out is required for a Home Health Certificate. (Prerequisites: NUNA1400 or concurrent enrollment) (1 hr lec/0 hrs lab/0 hrs OJT)

NUNA2999 Special Topics in Nursing Assistant 1-3 credits (I)
Study of special topics in nursing assistant. Special course topics will be announced in the class schedule.

Nursing – Practical (Courses are reserved for students who receive acceptance into the Practical Nursing program)

NUPN1400 Nursing Trends I 1 credit (F/S)
This course introduces the student to the history of nursing, health care systems, basic communication, nursing

process, legal-ethical issues, patient teaching and cultural diversity in nursing. Fee: Nurse Entrance Test. (Prerequisites: Semester I courses on program planner. Priority will be given to students who register in Semester II. Instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

NUPN1410 Adult Nursing I 4 credits (F/S)
This course covers nursing care of the patient experiencing disorders in the following systems: immune, integument, neoplasm, musculoskeletal, endocrine (diabetes only), reproductive, urinary, gastro-intestinal and accessory. The content focuses on the pathophysiology, medical treatment and nursing management of common disorders in these systems. Related pharmacology and nutritional concepts are integrated. (Prerequisites: Semester I courses NUNA1400, NUPN1400 & NUPN1430 or concurrent enrollment) (4 hrs lec/0 hrs lab/0 hrs OJT)

NUPN1420 PN Technical Skills I 3 credits (F/S)
This course includes both a lecture and laboratory component. The lecture portion covers the patient's medical record, documentation, microbiology, pre and post operative nursing care, and the body's response to wound healing. The laboratory portion will facilitate student demonstrations, practice and test outs of designated basic nursing skills. (Prerequisites: Semester I courses NUNA1400) (2 hrs lec/2 hrs lab/0 hrs OJT)

NUPN1430 Medication Concepts 3 credits (F/S)
This course covers techniques of administering medications and the use of medication reference materials. Math skills, terminology and abbreviations needed to interpret medication orders are stressed. This course includes medication theory and administration of gastrointestinal, topical, and injectable medications including care of the patient with an IV. Students may not progress to Semester III clinicals without successfully completing this course. (Prerequisites: Completion of MATH1420, or equivalent or instructor's consent, NUNA1400) (2 hrs lec/2 hrs lab/0 hrs OJT)

NUPN1440 Psychosocial Nursing 2 credits (F/S)
This course covers therapeutic communication throughout the life span, family structure, domestic violence, stress, coping and defensive mechanisms, and addictive behavior. The mental health component covers Manic Depressive Disorder, Schizophrenia, Obsessive Compulsive Disorder, suicide, and grieving. The course focuses on the Practical Nurse's implementation of therapeutic communication techniques and the detection, nursing management, and medical treatment of the mental health disorders and conditions. (Prerequisites: NUNA1400 or concurrent Semester II courses) (2 hrs lec/0 hrs lab/0 hrs OJT)

NUPN1458 Practical Nursing Clinical I 1 credit (F/S)
This course covers clinical application of nursing care principles for the beginning student making the transition from the nursing assistant to the Practical Nurse role. The course focuses on care and skills learned in theory and lab courses. The nursing process will be used in caring for a patient in a stable situation. Safety, professionalism, and dependability are emphasized. Fee: liability insurance. (Prerequisites: NUNA1400, NUPN1410, NUPN1420 & NUPN1430 or concurrent enrollment, current First Aid and CPR, and physical exam) (0 hrs lec/2 hrs lab/0 hrs OJT)

NUPN1468 Practical Nursing Clinical II 3 credits(F/S)
 This is the first two-day clinical course in a series of four courses. It expands on basic hands-on clinical concepts from NUPN1458 in the areas of skill development, application of theory base to clinical situations, and professionalism. Improved efficiency and organizational skills in delivering nursing care will be developed. (Prerequisites: NUPN1458 or concurrent enrollment, and current First Aid and CPR, Mantoux, and physical exam) (0 hrs lec/6 hrs lab/0 hrs OJT)

NUPN1475 PN Skills Review 1 credit (F/S)
 This course includes a review of medication administration, sterile technique, and charting. This course is required for part-time students or the student returning to the clinical setting after being absent for one or more semesters. (Prerequisites: NUPN1420, NUPN1430 and/or NUPN1458, NUPN1468; instructor's consent) (0 hrs lec/2 hrs lab/0 hrs OJT)

NUPN1478 Refresher Clinical 2 credits(F/S)
 This course is for the student who has been away from the clinical site for one semester or more, or for the student who requests additional clinical time (one time only). Fee: liability insurance. (Prerequisites: NUPN1475 and completion of one or more clinical rotations; instructor's consent) (0 hrs lec/4 hrs lab/0 hrs OJT)

NUPN1479 PN Special Topics 1-4 credits (F/S)
 This course is designed for a student transferring from a nursing program to LSC PN program or returning to this program in order complete requirements for a current Practical Nursing course. The student must have earned credit (grade "C" or better) in a previous PN course which does not equate to current PN course(s). A signed contract outlining content, skill demonstration or testing, and/or written testing requirements will be designed for each student. This course may be taken for up to four credits (maximum of 2 for theory and 2 for lab) per semester depending on content needed. (Prerequisites: Completion of Semester I and prerequisites for Semester II courses [as identified on the Practical Nursing program planner] or instructor's consent)

NUPN1500 Nursing Trends II 1 credit (F/S)
 This course covers PN licensure, role of the Board of Nursing, the Nurse Practice Act, the INEC (Itasca Nursing Education Consortium), as well as laws, trends, and issues within the health care delivery system with emphasis on the role of the Practical Nurse. (Prerequisites: Concurrent enrollment in NUPN1538, NUPN1558, and NUPN1568) (1 hr lec/0 hrs lab/0 hrs OJT)

NUPN1510 Adult Nursing II 4 credits(F/S)
 This course covers nursing care of the patient experiencing disorders in the following systems: respiratory, blood/lymphatic, cardiac, peripheral vascular, eye/ear, nervous, and endocrine (excluding diabetes). The content focuses on the pathophysiology, medical treatment and nursing management of common disorders in the above systems. Related pharmacology and nutritional concepts are integrated. (Prerequisites: NUPN1410, NUPN1430) (4 hrs lec/0 hrs lab/0 hrs OJT)

NUPN1520 PN Technical Skills II 1 credit (F/S)
 In this laboratory course, the student will perform designated skills that have been learned in NUPN1410,

NUPN1510 and/or NUPN1530. (Prerequisites: NUPN1420, NUPN1510, NUPN1520, or concurrent enrollment) (0 hrs lec/2 hrs lab/0 hrs OJT)

NUPN1531 Maternal/Child Nursing 3 credits(F/S)
 This course covers the normal process of pregnancy, labor and delivery, and the care of the mother and baby after birth. An introduction to the complications of each area are covered. The pediatric portion covers the hospitalized child, communicable diseases and immunizations, along with common childhood disorders or illnesses, and child abuse. (Prerequisites: NUPN1400, NUPN1410, NUPN1420, NUPN1430, NUPN1440) (3 hrs lec/0 hrs lab/0 hrs OJT)

NUPN1538 Maternal/Child Clinical 2 credits(F/S)
 This course covers clinical application in caring for the stable obstetric and pediatric patient. The obstetrical component covers observation and assistance for the patient in labor and delivery, and providing care for the postpartum patient and newborn infant. The pediatric portion covers the care of the well/ill child, ages newborn to 17. The student will make nursing care adaptations related to the family unit. Safety, professionalism, and dependability are emphasized. (Prerequisites: NUPN1468, NUPN1510, NUPN1531 or concurrent enrollment; current CPR, Mantoux, and physical exam) (0 hrs lec/4 hrs lab/0 hrs OJT)

NUPN1540 Gerontology in Nursing 2 credits(F/S)
 This course is designed to present nurses with information and learning tools to adapt nursing skills to the aging population receiving health care in a variety of settings. Leadership skills are introduced to assist caregivers in long-term care facilities at the Practical Nurse level. (Prerequisites: Concurrent enrollment in NUPN1538, NUPN1558, and NUPN1568) (2 hrs lec/0 hrs lab/0 hrs OJT)

NUPN1558 Practical Nursing Clinical III 2 credits(F/S)
 This course covers clinical application of common medical/surgical conditions using the nursing process. The student will make nursing care adaptations related to the lifespan. Professionalism and dependability are emphasized. Nursing care will be delivered more timely and accurately, while demonstrating more depth and understanding of the nursing process and theory. (Prerequisites: NUPN1468, NUPN1510, NUPN1520 or concurrent enrollment; current First Aid and CPR, Mantoux, and physical exam) (0 hrs lec/4 hrs lab/0 hrs OJT)

NUPN1568 Practical Nursing Clinical IV 2 credits(F/S)
 This course covers increased complexity of common medical/surgical conditions using the nursing process. The student will make nursing care adaptations related to the lifespan. Professionalism and dependability are emphasized. Nursing care will be delivered timely and accurately, while demonstrating understanding of integration of multiple diagnoses while delivering nursing care. (Prerequisites: NUPN1558 or concurrent enrollment; current First Aid and CPR, Mantoux, and physical exam) (0 hrs lec/4 hrs lab/0 hrs OJT)

NUPN1608 Clinical Synthesis 2 credits (S)
 This course consists of concentrated clinical experience in which the student applies the knowledge, skills and attitudes learned throughout the program. The student will demonstrate the ability to function as an entry-level Practical Nurse. Fee: LPN Comprehensive Exam. (Prerequisites: Successful completion of all PN program courses; current First Aid and CPR, Mantoux, and physical exam) (0 hrs lec/4 hrs lab/0 hrs OJT)

NUPN2999 Special Topics in Practical Nursing
 1-3 credits (I)
 Study of special topics in practical nursing. Special course topics will be announced in the class schedule.

Nursing – Associate Degree

NURS2510 Advanced Nursing Concepts 3 credits (F)
 This nursing course is designed to build on concepts, knowledge, and skills introduced in the Practical Nursing Program. This course includes advanced nursing skills necessary for the LPN to make the necessary transition to the RN role. Jean Watson's Theory of Human Caring is presented emphasizing concepts of the art and science of nursing. A major focus is on the nursing process identifying the person as an adaptive system as the nurse moves through the steps of the nursing process. Components of physical assessment are included. (Prerequisites: Admission to the Associate Degree Nursing Program) (2.5 hrs lec/1 hr lab/0 hrs OJT)

**NURS2520 Adaptations Within the Family Unit-
 Pediatric Nursing** 2 credits (F)
 While caring for the pediatric client with health disorders and their family, emphasis is placed on the use of the nursing process and the development of nursing care plans. The student is provided with the knowledge and skills required to assist the patient and family to select adaptive responses in meeting basic needs and developmental demands of the ill child in the acute care setting. The acute and chronic disease conditions common to children are discussed. (Prerequisites: Concurrent enrollment and NURS2510) (1 hr lec/2 hrs lab/0 hrs OJT)

**NURS2530 Adaptations Within the Family Unit-
 Obstetrical Nursing** 2 credits (F)
 The two distinct phases of the maternal role, childbearing and childbirth are emphasized. In the childbearing and childbirth roles emphasis is on the use of the nursing process and the development of nursing care plans for obstetric patients with high risk or more complex problems. It includes care of the mother and newborn emphasizing family interaction role adaptation. (Prerequisites: Taught concurrently with NURS2510) (1 hr lec/2 hrs lab/0 hrs OJT)

**NURS2640 Adaptations to Acute Health
 Interruptions-Cardiopulmonary Nursing**
 3 credits (F/S)
 The nursing courses for the second year are designed to build on concepts, knowledge, and skills introduced in the Practical Nursing Program. In the cardiopulmonary course, emphasis is on the use of the nursing process and the development of nursing care plans to assist in adaptive responses to interruptions related to cardiovascular and respiratory diseases. Nursing actions are implemented to promote adaptations in patients demonstrating complex

cardiovascular, respiratory, and hematological interruptions. Clinical experience is provided on past coronary, coronary, and intensive care units. (Prerequisites: CHEM1310 and successful completion of NURS2510) (1 hr lec/4 hrs lab/0 hrs OJT)

**NURS2650 Adaptations to Acute Health
 Interruptions-Surgical Nursing**
 3 credits (F/S)

This nursing course is designed to build on concepts, knowledge and skills introduced in the Practical Nursing Program. In the surgical component emphasis is on the use of the nursing process and the development of nursing care plans to assist in the adaptive responses to interruptions related to complex gastrointestinal, hepatic, biliary, pancreatic, renal, and neurological interruptions. (Prerequisites: Successful completion of NURS2510) (1 hr lec/4 hrs lab/0 hrs OJT)

**NURS2710 Adaptations to Complex Health
 Interruptions-Medical Nursing**
 4 credits (S)

This nursing course for the second year is designed to build on concepts, knowledge, and skills introduced in the Practical Nursing Program. In the medical nursing course, physiological adaption involving fluids and electrolytes, endocrine functions, as well as nutrition, activity, rest, and protections as related to maladaptive responses to interruptions in skin and muscular problems. The course prepares the student to provide care to adults having acute and chronic health interruptions. Emphasis is on the development of nursing care plans to assist the adult patient with adaptive responses to complex health problems. (Prerequisites: Taught concurrently with NURS2730) (1 hr lec/6 hrs lab/0 hrs OJT)

**NURS2720 Adaptation to Complex Health
 Interruptions-Mental Health Nursing**
 3 credits (S)

This nursing course is designed to build on concepts, knowledge, and skills introduced in the Practical Nursing Programs. In the mental health component, emphasis is on the use of the nursing process and the development of nursing care plans for clients with psychiatric diseases. Nursing actions are implemented to promote adaptations in the patients who demonstrate complex mental health disorders. Clinical experience is provided on the adolescent and adult mental health units. (Prerequisites: Taught concurrently with NURS2730) (1 hr lec/4 hrs lab/0 hrs OJT)

**NURS2730 Adaptations to Associate Degree Nursing
 Roles** 2 credits (S)

The nursing courses for the second year are designed to build on concepts, knowledge, and skills introduced in the Practical Nursing Program. The course assists the student to synthesize and integrate previous course offerings in the expected practice of the Associate Degree nursing graduate. The roles of the A.D. nurse as a provider of care, manager of care, and member within the nursing profession are identified and discussed. The student is also introduced to the role in community health. Emphasis is placed on identifying sources of referral, case findings, community assessment, family theory, and transculture nursing. (Prerequisites: Taught concurrently with NURS2720) (1.5 hrs lec/1 hr lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

NURS2732 Intensive Care Unit Internship 3 credits (F/S)

This nursing course is an elective for the Associate Degree nursing student. The course is designed to build on skills introduced in the practical nursing program and expose the student to the critical care environment. In the Intensive Care Unit Internship, emphasis is on the use of the nursing process and the development of nursing care plans to assist in adaptive responses within the critical care unit. Nursing actions are implemented to promote adaptations in patients who are critically ill. Clinical experience may be provided on the surgical intensive care unit, medical intensive care unit, coronary intensive care unit, neurological intensive care unit, and the emergency department, for the PACU. (Prerequisites: Associate Degree Nursing Student and CPR) (1 hr lec/4 hrs lab/0 hrs OJT)

NURS2999 Special Topics in Nursing 1-3 credits (I)
Study of special topics in nursing. Special course topics will be announced in the class schedule.

Physical Education

PE1005 Karate 1 credit (F/S)
This course is an introduction to the fundamentals, etiquette and philosophy of karate and the martial arts. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1006 Advanced Karate 1 credit (F/S)
This course expands on the fundamentals of the martial arts with the introduction of advanced techniques including combination movements for fighting. (Prerequisites: PE1005) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1015 Tennis 1 credit (S)
Instruction in the fundamental skills of stroking, serving, and scoring. Emphasis on rules, strategies, and etiquette of the game. Students provide their own racquet and balls. Meets at an off campus site. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1025 Golf 1 credit (S)
A beginning level course emphasizing stroke fundamentals, equipment selection, rules of play as well as etiquette and safety. Practical experience on local courses and driving ranges. Students are encouraged to provide their own clubs. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1030 Badminton 1 credit (S)
Basic skills, techniques, conditioning, strategy and rules of badminton. This is a beginning level course. Fee for racket purchase required. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1045 Bowling 1 credit (F/S)
A beginning level course teaching bowling fundamentals of approach, stance, delivery, scoring, and converting splits. Class is held off campus. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1050 Downhill Skiing 1 credit (S)
An introductory level course emphasizing fundamental downhill skiing techniques. Students in this course will

learn how to obtain equipment from rental area, how to properly put on boots, skis and use of poles, how to use a basic tow, to descend a gentle slope under control and ride a chair lift. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1055 Soccer 1 credit (S)
Fundamental instruction in the rules, strategies, and techniques of soccer. Specific emphasis on the development and refinement of individual player skills as well as cardiovascular enhancement. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1060 Archery 1 credit (I)
Introduction to history, safety, etiquette, and skills of target archery. This is a beginning course. Meets off campus. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1065 Cross-Country Skiing 1 credit (S)
Introduction to history, etiquette, and skills of Nordic skiing. A personal property fee will be charged for equipment and trail rental fees. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1070 Volleyball 1 credit (F/S)
This course is an introduction to the basic skills, rules, and strategies of the game of volleyball. This is a beginning level course with emphasis on both individual and team skill development. Volleyball is one of the few team-oriented activities considered a lifetime sport. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1075 Canoeing 1 credit (S)
Fundamental instruction in the basic strokes of canoeing. Principles of water safety and rescue are emphasized. Students must provide their own Coast Guard approved life vest. A canoe rental fee may be charged. (Prerequisites: Successful completion of PE1420 or demonstrated swimming ability to instructor) (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1400 Summer Outdoor Activities 1 credit (S)
Introduction to the skills, techniques, and safety necessary for summer outdoor recreation. This course will briefly highlight the areas of archery, canoeing, orienteering, outdoor cooking, fire building, and challenge course. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

PE1405 Winter Outdoor Activities 1 credit (S)
This course is an introduction to safety and skills necessary for winter outdoor recreational activities. This course will briefly introduce the students to areas of environmental learning, snowshoeing, orienteering, cross-country skiing, and winter naturalist/survival elements. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)

<p>Term Course Codes: (F) = Fall Semester (S) = Spring Semester (F/S) = Fall & Spring Semesters (I) = Intermittent (Arr) = Arranged</p>
--

- PE1410 Recreational Activities 1 credit (I)**
A course intended to introduce students to a variety of unique and non-traditional recreational activities frequently overlooked in many educational curriculums. An equipment rental fee may be assessed in this course. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1420 Swimming I 1 credit (I)**
For the beginner or non-swimmer. Students learn buoyancy, breath control, swimming strokes, and safety skills. Meets off campus. Includes A.R.C. Levels I-IV. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1421 Swimming II 1 credit (I)**
An intermediate-level course for people with demonstrated swimming ability. Stroke refinement and advanced water skills. Includes A.R.C. levels V-VII. Course meets off campus. (Prerequisites: Successful completion of PE1420, or ability to swim 50 yards) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1430 Country-Western Line Dancing 1 credit (I)**
This course will introduce the student to various popular country-western line dances. This is an alternative aerobic exercise method that promotes health and improves social interaction. (Prerequisites: The student must be physically able to perform country-western line dances. If students have any medical condition, they should consult their doctor to determine if this form of exercise is appropriate) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1435 Aerobics 1 credit (F/S)**
This course is an introduction to a low intensity/impact level of exercise including rhythmic steps, and kicks. All standards and guidelines of proper exercise and fitness will be followed. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1440 Advanced Aerobics 1 credit (F/S)**
This course follows new and innovative techniques of contemporary advanced aerobic exercise aimed to increase strength and cardiovascular conditioning. This is achieved through high impact exercises including rhythmic steps, jumps, arm work, abdominal work, leg and hip work, and kicks. The focus is on all major muscle groups for strengthening, aerobic work capacity, and toning. All standards and guidelines of proper exercise and fitness will be followed. (Prerequisites: None. A previous low-impact beginning level aerobics class is highly recommended) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1450 Weight Training 1 credit (F/S)**
Fundamental skills of muscular resistance training in the weight room. Emphasis on exercise selection, equipment utilization, management of program variables, and personal safety. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1465 Fishing Skills 1 credit (S)**
Instruction in freshwater fishing technique utilizing four basic methods: bait casting, fly casting, spin casting, and spinning. Students are encouraged to provide their own equipment and possess a valid fishing license. A personal property fee will be charged in addition to tuition. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1470 Beginning Yoga 1 credit (F/S)**
A beginning level course following the innovative techniques of Hatha and Raja Yoga, intended to promote strength, endurance and flexibility, reduce stress, and induce an overall sense of well-being. (Prerequisites: None) (0 hrs lec/2 hrs lab/0 hrs OJT)
- PE1570 Coaching and Officiating Volleyball 2 credits (I)**
Course cover strategies for coaching power volleyball. Analysis of player skill development. Course also involves understanding game rules and officiating responsibilities and techniques. May involve some on-court activities. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)
- PE1600 Boundary Waters Experience 2 credits (S)**
An opportunity to experience the pristine beauty of Northern Minnesota wilderness and to learn about geology, natural history, and history of the B.W.C.A. A personal property fee will be charged in addition to tuition. Canoeing/camping equipment, transportation and meals provided. (Prerequisites: Successful completion of the following courses or demonstrated proficiencies in PE1420 and PE1075; camping, canoeing, backpacking experience recommended) (1 hr lec/2 hrs lab/0 hrs OJT)
- PE1605 Weight Control through Walking 2 credits (F/S)**
Introduction to walking as a blueprint for weight control and a healthier lifestyle. Various fitness parameters are measured, both pre- and post-. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)
- PE1610 Lifeguard Training 2 credits (S)**
Knowledge and skills necessary to prevent and respond to aquatic emergencies. Successful completion of this course will meet American Red Cross Certification Standards. (Prerequisites: Minimum age 15 years. Ability to swim 500 yards [crawl, breaststroke and sidestroke], seven foot depth retrieve, and two-minute water tread) (1 hr lec/2 hrs lab/0 hrs OJT)
- PE1615 Lifetime Fitness 2 credits (F/S)**
A course designed to provide for the individual fitness needs of students in various occupational and lifestyle pursuits. Cross-training and resistance techniques will be employed along with an assessment of various fitness-related components of good personal health. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)
- PE1620 Essentials of Human Performance 3 credits (I)**
Examines the physiological changes occurring as a direct result of applied physical movement. Major emphasis upon the principles of resistance training, conditioning, and the interplay of human body systems. (Prerequisites: BIOL1140, HLTH1410, MATH1105 and PTA1460,  ) (3 hrs lec/0 hrs lab/0 hrs OJT)
- PE1625 Water Safety Instructor Training 2 credits (I)**
Skills and knowledge necessary to train instructor candidates to teach various levels of American Red Cross swimming programs. Successful completion of this course will meet American Red Cross Certification Standards. Course conducted off campus. (Prerequisites: Minimum age 17 years. Basic life guarding or lifeguard training profi-

ciency in addition to ARC Level VI Swimming Proficiency. Must pass Instructor Candidate Training Certificate [#3007]) (1 hr lec/2 hrs lab/0 hrs OJT)

PE1630 Introduction to Firearms 2 credits (S)

A comprehensive training course in the practical application of various types of firearms. Emphasis on knowledge, safety, attitude, maintenance, and proper storage of all firearms. Successful completion of this course will lead to NRA basic pistol certification. Students may also use this course to apply for a Minnesota Hunter Education Certification. (Prerequisites: None) (2 hrs lec/0 hrs lab/0 hrs OJT)

PE1635 Self-Defense for Life 2 credits (F/S)

A system of self-defense responses including awareness, assessment, action, and physical force in response to unwarranted aggression. (Prerequisites: None) (1 hr lec/2 hrs lab/0 hrs OJT)

PE1640 Organization and Administration of Wellness, Human Performance, and Sports 3 credits (F/S)

This course is designed to shape today's students into tomorrow's leaders in the fields of wellness, human performance and sport. Emphasis on administrative leadership roles in professional workforce fields. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PE1645 Boot Camp Basics 2 credits (F/S)

A very rigorous fitness-training course designed to familiarize students with certain career opportunities available to them in both military and governmental service agencies. Fundamentals of physical fitness, military discipline, and drill and ceremony will be stressed. A course fee will be charged to cover the initial cost of a required workout uniform (shorts, T-shirt, socks, and cap). (Prerequisites: All students should be in excellent health and free from any debilitating medical profiles which may preclude them from vigorous exercise or marching. Students may be required to take a medical examination and provide documentation of good health.) (2 hr lec/2 hr lab/0OJT)

PE2999 Special Topics in Physical Education 1-3 credits (I)

Study of special topics in physical education. Special course topics will be announced in the class schedule.

Philosophy

PHIL1120 Introduction to Philosophy 3 credits (S)

This course will survey some of the major questions that have concerned philosophers throughout history. Included will be a presentation of basic philosophical concepts and vocabulary necessary to understand these concepts. The course will include a discussion of such topics as the existence of God, causality, freewill and determinism, the mind-body problem, and theories of knowledge and reality. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL1125 Logic 3 credits (F/S)

An introduction to Aristotelian logic and modern symbolic logic. Include formal predicate and sentential logic, induction, and methods of translation. MTC goal areas:

(2) Critical Thinking (4) Mathematics/Logical Reasoning, and (6) Humanities and Fine Arts. (Prerequisites:  ) and Algebra I or equivalent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL1130 Ethics 3 credits (F/S)

Important ethical theories of right and wrong, good and bad. Includes egoism, divine command theory, natural law theory, utilitarianism, duty-based ethics, social contract theory, and virtue theory. The course will emphasize the use of reason in decision making. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (9) Ethical and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL1140 Critical Thinking 3 credits (F/S)

A study of fundamental thinking, reasoning, and language patterns encountered in everyday life. Topics include the nature of argument, informal fallacies, evaluating arguments, and critical problem solving. Focus will be to develop reasoning skills useful in everyday situations. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL2140 Philosophy of Religion 3 credits (F)

An examination of ideas central to religious philosophy. Includes discussion of religious experience, the origins of religion, analysis of religious claims, and ideas of the holy. MTC goal areas: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites: ENGL1106 with a grade of "C" or better or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL2150 Political Philosophy 3 credits (S)

A survey of political concepts from ancient to modern times. Includes discussion of ideologies such as dictatorship, democracy, socialism and anarchism, as well as, concepts such as right, equality, justice, liberty, and political obligation. MTC goal areas: (2) Critical Thinking, (6) Humanities and Fine Arts, and (9) Ethic and Civic Responsibility. (Prerequisites: ENGL1106 with a grade of "C" or better) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHIL2999 Special Topics in Philosophy 1-3 credits (I)

Study of special topics in philosophy. Special course topics will be announced in the class schedule.

Physics

PHYS1001 Fundamental Concepts of Physics 4 credits (F)

This is a laboratory oriented course covering the basic concepts of Physics. Conceptual understanding will be stressed. Some simple algebra may also be used. Designed for middle grade education, liberal arts, rad. tech or other health, technical fields, or as satisfying AA requirements as a natural science course. MTC goal areas: (2) Critical Thinking, and (3) Natural Sciences. (Prerequisites: None) (3 hrs lec/2 hrs lab/0 hrs OJT)

PHYS1101 Introductory Astronomy 4 credits (I)
Students in astronomy will be introduced to several aspects of the universe, will see how astronomical ideas have developed through history, and how our ideas about the universe (and our place in it) have changed. They will investigate the motions of the sun, moon, stars, and visible planets and will learn to identify the major constellations in the night sky and will become aware of changes that occur in the sky with the passage of the seasons. Students will discover what has been learned through exploration of the planets, moons, and other bodies in our solar system. They will learn how the sun produces energy, and how stars form, evolve, and die. Students will discover how galaxies are organized and what their motions teach us about the origin and evolution of the universe. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites:   and MATH0450) (3 hrs lec/2 hrs lab/0 hrs OJT)

PHYS1105 Physical Science 4 credits (I)
A survey of physical science introducing students to the basic principles and concepts of physics, chemistry, geology, astronomy, and meteorology. The focus will be on real life examples and the interconnections between these disciplines. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites:  , and college level math) (3 hrs lec/2 hrs lab/0 hrs OJT)

PHYS1170 Physics for Medical Community 4 credits (I)
This is a preparatory physics course for the medical community. This course includes a study of mass, force, energy waves, and electro-magnetism. Special emphasis is given to x-rays, ultrasound, MRI, and other topics relating to the medical community. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: MATH0460 or equivalent,  , or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

PHYS1201 Introduction to Physics I 5 credits (F/S)
This is an algebra-based general physics sequence course. It is designed for students majoring in education, medical, biological sciences, other pre-professional, and engineering technology fields. The course will focus on the study of the mechanics of particles and rigid bodies including kinematics, dynamics, conservation laws, linear, angular momentum, work and energy, fluids, Thermodynamics, temperature and heat, kinetic theory. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: MATH0470 or MATH1532 and/or equivalent and placement by assessment test score) (4 hrs lec/2 hrs lab/0 hrs OJT)

PHYS1202 Introduction to Physics II 5 credits (S)
This course is designed for pre-professional and engineering technology fields. This is the second course in algebra and trigonometry-based introductory physics. This course focuses on the study of electricity, magnetism, and field theory, waves, wave interaction, vibrations, sound, and light. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: PHYS1201 or equivalent or instructor's consent) (4 hrs lec/2 hrs lab/0 hrs OJT)

PHYS2201 General Physics I 5 credits (F)
This calculus-based physics course is designed for science and engineering majors. It focuses on the study of mechanics of particles and rigid bodies including kinemat-

ics, dynamics, conservation laws, linear and angular momentum, behavior of fluids at rest and in motion, and thermodynamics. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: MATH2204 or equivalent or instructor's consent) (4 hrs lec/2 hrs lab/0 hrs OJT)

PHYS2202 General Physics II 5 credits (S)
This is the second course in the calculus-based physics sequence designed for science and engineering majors. It focuses on the study of waves and vibration, sound, light, electric field and forces, electric energy, circuits, magnetism and electro-magnetism. MTC goal areas: (2) Critical Thinking and (3) Natural Sciences. (Prerequisites: PHYS2201 or equivalent or instructor's consent) (4 hrs lec/2 hrs lab/0 hrs OJT)

PHYS2401 Statics 3 credits (I)
This calculus based engineering/physics course is designed for engineering majors. It focuses on a study of force systems including composition and resolution of forces, simple structures, principles of equilibria, centroids and moment of inertia. Nature and influence of friction and deformation. MTC goal areas: (2) Critical Thinking, (3) Natural Sciences, and (4) Mathematical/Logical Reasoning. (Prerequisites: PHYS2201 and MATH2204, equivalent or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PHYS2999 Special Topics in Physics 1-3 credits (I)
Study of special topics in physics. Special course topics will be announced in the class schedule.

Political Science

PSCI1110 American Government 3 credits (F)
A study of theory, politics, constitutional foundations, structure, functions, procedures, and operation of the American national government. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (9) Ethic and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSCI1120 Introduction to Political Science 3 credits (S)
Essentials of political science with a description of traits universal to the governing processes of all human societies, and concern with the nature and consequences of major variations in these processes. Combines a theoretical and conceptual framework with a study of selected political systems and countries. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (9) Ethic and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSCI1130 State and Local Government 3 credits (S)
State and local politics in the United States with special emphasis on Minnesota. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (9) Ethic and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSCI1140 International Politics 3 credits (S)
The study of the political relations between states, how and why conflicts arise, and the various methods of attempting to resolve these conflicts. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSCI2999 Special Topics in Political Science 1-3 credits (I)
Study of special topics in political science. Special course topics will be announced in the class schedule.

Psychology

PSYC1012 Psychology of Adjustment 3 credits (F/S)
A study of psychological theories as they apply to healthy adjustment in everyday life. Emphasis is placed on interpersonal relationship skills, self-concept, self-empowerment and responsibility, stress management, communication skills, and problem-solving. MTC goal areas: (5) (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT).

PSYC1050 Career Exploration 1 credit (F/S)
A scientific and personal approach to the process of matching individual interests, values, personality type, and aptitudes to suitable occupations. (Prerequisites: None) (1 hr lec/0 hr lab/0 hr OJT)

PSYC1115 Psychology of Genealogy 3 credits
This course will enable students to trace their own family history and to identify how their roots have influenced the development of the self. Students will trace their genealogy, examine family myths, beliefs, culture, race, ethnicity, traditions, and identify how these have impacted their own lives and the lives of their ancestors. (Prerequisites:  , Basic Internet computer skills) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC1120 General Psychology 3 credits (F/S)
Scientific study of human behavior. A comprehensive introduction to the major factors in human behavior: heredity, environment, maturation, motivation, emotion, personality, perception, learning, thinking, social influences, and mental health. Designed for students who are interested in an in-depth approach to the scientific study of psychology. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC1135 Human Development 3 credits (F)
A scientific, theoretical, and personal examination of physical, intellectual, emotional, and social development across the life span. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: PSYC1120 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2125 Child Psychology 3 credits (F/S/I)
An in-depth practical and scientific study of the physical, cognitive, and socioemotional changes involved in prenatal development through late childhood. Emphasis is placed on healthy prenatal development, parenting, learn-

ing disabilities, relationships, schools, and healthy development. MTC goal areas: (2) Critical Thinking and (5) History and the Social and Behavioral Sciences. (Prerequisites: PSYC1120 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2130 Adolescent Psychology 3 credits (F/S)
The study of psychological and developmental characteristics during adolescence. Included are the biological, cognitive, moral, and sexual development in healthy adolescent development. Risk factors and problems in adolescence are explored, particularly with high risk adolescents. This course is appropriate for any student who would like to learn more about adolescence and in particular anyone working with adolescents in any capacity including parents. MTC goal areas: (2) Critical Thinking and (5) History and the Social and Behavioral Sciences. (Prerequisites: PSYC1120) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2140 Abnormal Psychology 3 credits (F/S)
Mental and behavioral disorders: their theoretical perspectives, classification, description, assessment, and intervention techniques. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: PSYC1120 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2145 Social Psychology 3 credits (F/S)
Social Psychology is a review of contemporary social psychology. Methods, key concepts, terms, and current findings will be covered. Additionally, the course will include a review of theory while encouraging self-exploration MTC Goals: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences), and (7) Human Diversity (Prerequisites:  )

PSYC2150 Psychology of Aging and Elderly 3 credits (F/S)
An introduction to the scientific and practical study of the physical, social, cognitive, and emotional changes in later life and how these factors affect families, caregivers, and communities. Designed for all students in the helping professions and for those interested in the psychological functioning of individuals in the decades of later life. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: PSYC1120 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2160 Health Psychology 3 credits (I)
A scientific and practical course concentrating on understanding the many psychological influences on how people stay physically and mentally healthy. It focuses on the psychological forces; stress, personality, attitudes, beliefs, coping techniques – involved in health promotion, maintenance, and the treatment of illness. Designed for students and for all health professionals wishing to learn more about the mind/body interactions and how these affect physical and mental health. MTC goal areas: (2) Critical Thinking and (5) History and the Social and Behavioral Sciences. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

PSYC2999 Special Topics in Psychology 1-3 credits (I)
Study of special topics in psychology. Special course topics will be announced in the class schedule.

Physical Therapist Assistant

PTA1000 Introduction to Health and Medical Literature 1 credit (F)

This course provides a basic introduction to understanding scientific and health-related literature, with a focus on written and online scientific journals. Students will learn how to find journal articles relevant to a particular health care field of study, obtain these articles, and better understand the contents of such articles. Students writing papers in health-related courses will find this course helpful. The course also covers various methods of citing references for written papers. (Prerequisites: ENGL1106) (1 hr lec/0 hrs lab/0 hrs OJT)

PTA1400 Documentation for PTAs 1 credit

This course covers the guidelines, methods, analysis, and completion of effective written documentation of physical therapy treatment. (Prerequisites: BIOL 1140, ALTH 1410, ENGL 1106, Clinical Observation Form) (1 hr lec/0 hrs lab/0 hrs OJT)

PTA1410 Introduction to Physical Therapist Assisting 3 credits (F)

This course introduces the role of the physical therapist assistant and the skills used daily as a physical therapist assistant. Emphasis is on professional behaviors, legal and ethical practice, principles of pain and therapeutic touch, and patient care skills including: lifting methods, basic wheelchair operations, body mechanics, vital signs, standard precautions, patient positioning and draping, patient interviewing, and gait training with ambulation aids. (Prerequisites: BIOL 1140, ALTH 1410, ENGL 1106; acceptance to PTA Program.) (1.5 hrs lec/3 hrs lab/0 hrs OJT)

PTA1411 Procedures for PTAs I 2 credits (F)

This course covers basic physical therapy skills with emphasis on massage, superficial heat, and cryotherapy, and intermittent compression. Integration of previous or concurrent patient care skills is combined with the modality techniques. Student awareness of evidence-based practice is emphasized. (Prerequisites: BIOL 1140, ALTH 1410, ENGL 1106, Clinical Observation Form.) (1 hr lec/2 hrs lab/0 hrs OJT)

PTA1417 Physical Therapy Clinic I 2 credits (F)

This course involves working in an outpatient physical therapy clinic in which first year PTA students will work in partnership with second year students to provide physical therapy services to patients. The student, under the supervision of physical therapists and physical therapist assistants in the clinic, will follow the physical therapist's treatment plan and apply physical therapy skills learned during concurrent courses. Skills will begin with those of a physical therapy aide and receptionist, beginning development of generic abilities (professional behaviors and communication), introduction to legal and ethical practice and role of the PTA, and progress to applying simple physical therapy interventions and data collection techniques. Time for discussion and reflection is included. A personal property fee is charged. (Prerequisites: Concurrent enroll-

ment in PTA1411 or instructor's consent, liability insurance, evidence of recent Mantoux test, evidence of current CPR certification (ALTH 1430 or equivalent satisfies this requirement) (0 hrs lec/4 hrs lab/0 hrs OJT)

PTA1421 Pathology for PTAs I 1 credit (F)

This course provides an introduction to pathophysiology of the musculoskeletal, endocrine, and circulatory systems. The roles of health care professionals involved in the care of persons with disease will also be discussed. A variety of pathologies are studied which include arthritic conditions, spine disorders, inflammatory conditions, common orthopedic conditions, nutritional disorders, diabetes, and disorders of the circulatory system. (Prerequisites: BIOL 1140, ALTH 1410, ENGL 1106, and have taken or enrolled in PTA 1460.) (1 hr lec/0 hrs lab/0 hrs OJT)

PTA1431 Therapeutic Exercise I 2 credits (F)

This course presents the theoretical information and instructions for performing and documenting passive, active assistive, and active range of motion exercises, goniometry measurements of joint range of motion, passive stretching, and manual muscle strength testing. Patient handling skills which have been previously learned and are being concurrently learned are integrated into this course. A personal property fee will be charged in addition to tuition. (Prerequisites: ALTH1410, BIOL1140, ENGL1106, and concurrently enrolled in or have taken PTA1460, or consent of instructor) (1 hr lec/2 hrs lab/0 hrs OJT)

PTA1460 Functional Kinesiology I 2 credits (F)

This course provides the foundation of musculoskeletal information recommended for students interested in health and exercise programs that focus on quality of movement. Students study the human musculoskeletal system and principles that influence movement. The course includes studying the location and function of bones and muscles. Students are introduced to palpation skills and observation skills through the analysis of functional movement. (Prerequisites: BIOL1140 or BIOL1150, ALTH1410) (1 hr lec/2 hrs lab/0 hrs OJT)

PTA1512 Procedures for PTAs II 2 credits (S)

This course covers a continuation of physical therapy skills including: hydrotherapy, ultrasound, sterile technique and sterile dressing changes, spinal traction, CPM, biofeedback, taping, wound care, and dynamic splinting. Previously learned patient care skills are integrated. There is a personal property fee attached to this course. (Prerequisites: PTA1410, PTA1460, PTA1431, PTA1411, and PTA1421) (1 hr lec/2 hrs lab/0 hrs OJT)

PTA1522 Pathology for PTAs II 1 credit (S)

This course includes a continuation of concepts related to pathophysiology of different systems of the body. Areas covered include organ transplant, eye and ear disorders, mental health conditions, infectious disease, integumentary system pathologies, selected circulatory and cardiac conditions, and the role of health care providers in these conditions. Also included are principles related to pharmacology and diagnostic imaging. (Prerequisites: PTA 1421, PTA 1460, PTA 1431, PTA 1411, PTA 1410.)

Term Course Codes:

(F) = Fall Semester
(S) = Spring Semester
(F/S) = Fall & Spring Semesters
(I) = Intermittent
(Arr) = Arranged

PTA1527 Physical Therapy Clinic II 2 credits (S)

This course involves working in an outpatient physical therapy clinic in which first year students treat patients under the supervision of physical therapists and physical therapist assistants. The student will follow the physical therapist's treatment plan and provide physical therapy services learned during concurrent and previous courses. Skills will begin with those practiced during PTA1417 and progress to applying physical therapy interventions and data collection skills as they are learned during the second semester. Time for discussion and reflection is included. (Prerequisites: PTA1417, concurrent enrollment in PTA1512, or consent of instructor, CPR certification, liability insurance.) (0 hrs lec/4 hrs lab/0 hrs OJT)

PTA1532 Therapeutic Exercise II 3 credits (S)

This course covers muscle structure and function, the theory of therapeutic exercise, and types of exercise appropriate for certain patient conditions. Mobility, stretching, strengthening, endurance and coordination exercise programs are included. Normal and abnormal postures are analyzed. Previously learned patient handling skills are integrated with exercise. A lab fee is required. (Prerequisites: PTA 1410, PTA 1460, PTA 1431, PTA 1411, PTA 1421, or consent of instructor.) (2 hrs lec/2 hrs lab/0 hrs OJT)

PTA1541 Issues in Physical Therapy Practice I 1 credit (S)

This course covers issues the PTA will see in the work setting. Emphasis is on professional behaviors, ethical and legal practice, professional communication, and patient respect issues. These topics are integrated with previously learned skills and with skill in concurrent courses. (Prerequisites: PTA 1410, PTA 1460, PTA 1431, PTA 1411, PTA 1421.) (1 hr lec/0 hrs lab/0 hrs OJT)

PTA1562 Functional Kinesiology II 4 credits (S)

This course covers the structure and function of joints and the spinal nerves. Students build on knowledge from Functional Kinesiology I in analyzing human movement. The course includes data collection and treatment intervention related to dysfunction of the joints and musculoskeletal system, including a unit on acute rehabilitation for conditions which require orthopedic surgery. PTA skills are integrated with therapeutic exercise and modality knowledge. Students learn to visualize and describe normal gait and common gait deviations. (Prerequisites: PTA 1460, PTA 1411, PTA 1410, PTA 1431, PTA 1421.) (3 hrs lec/2 hrs lab/0 hrs OJT)

PTA1576 Clinical Skills Review 1 credit (F/S)

This course is a supervised open lab course. This elective course could be taken for a variety of reasons: review of previous skills; review or practice of new/concurrent course skills; enhancement and application of clinical skills. The course could be taken repeatedly up to a maximum of 4 credits whenever lab courses are required or it could be taken to meet necessary clinical criteria (re-entry or "Plan of Actions") (Prerequisites: Currently enrolled in PTA courses) (0 hrs lec/2 hrs lab/0 hrs OJT)

PTA2613 Procedures for PTAs III 2 credits (F)

This course covers the theory of electrical stimulation, the therapeutic current characteristics which cause physiological responses and the equipment that produces these

responses. Previously learned patient care skills are integrated into the course. A personal property fee is required. (Prerequisites: PTA1527) (1 hr lec/2 hrs lab/0 hrs OJT)

PTA2623 Pathology for PTAs III 2 credits (F)

This course provides a continuation of concepts related to pathophysiology of various systems of the body. Orthopedic conditions and their rehabilitation are covered in greater depth than in previous courses. In addition, women's health issues, gastrointestinal conditions, cancer, respiratory system disorders, selected disorders of the nervous system, and selected developmental pathologies are covered. This course reinforces that pathologies may affect multiple systems of the body and have a social and economic effect on the client. (Prerequisites: PTA 1522) (2 hrs lec/0 hrs lab/0 hrs OJT)

PTA2637 Physical Therapy Clinic III 2 credit (F)

This course involves working in an outpatient physical therapy clinic in which second year PTA students work in partnership with first year students to provide physical therapy services to patients. The student, under the supervision of physical therapists and physical therapist assistants in the clinic, will follow the physical therapist's treatment plan and apply physical therapy skills learned during concurrent and previous courses. The second year student will instruct the first year student in the skills of a physical therapy aide and receptionist, introduction to legal and ethical practice and role of the PTA, and in the application of simple physical therapy interventions and data collection skills. The second year student will continue to apply physical therapy skills learned during the first year in the program and add new skills as learned in the second year. Time for discussion and reflection is included. Liability insurance fee. (Prerequisites: PTA 1527, concurrent enrollment in PTA 2613 or instructor's consent, evidence of current CPR certification (ALTH 1430 or equivalent satisfies this requirements), evidence of recent Mantoux test, liability insurance.) (0 hrs lec/4 hrs lab/0 hrs OJT)

PTA2642 Issues in Physical Therapy Practice II 1 credit (F)

This course covers legal and ethical issues the PTA will be exposed to or involved with in the physical therapy profession and in the clinic. Emphasis is on PTA career options and licensure, resume development, and patient related issues such as long-term care, sexuality, cultural diversity, motivation, reimbursement issues, disability, and death and dying. (Prerequisite: PTA 1541, or consent of instructor.) (1 hrs lec/0 hrs lab/0 hrs OJT)

PTA2650 Rehabilitation and Functional Therapy 4 credits (F)

This course applies motor control and motor learning theories to therapeutic exercise knowledge to meet the needs of the neurologically-impaired patient and family to return the patient to a functional lifestyle. Content includes uses of adaptive equipment, mobility needs for activities of daily living, facilitation techniques, patient and family education, wheelchair mobility, and identification of architectural barriers. Previously learned patient handling skills are integrated. (Prerequisites: All first year PTA courses.) (2 hrs lec/4 hrs lab/0 hrs OJT)

PTA2651 Advanced Physical Therapy Techniques 3 credits (F)

This course covers special techniques and treatment protocols with which the PTA will assist the physical therapist. These include sensory testing, cardiac rehab, chest therapy, care of the geriatric and pediatric clients, pool therapy, Swiss Ball activities, care of the patient with an amputation, and the components of industrial medicine. Previously learned skills are integrated. Lab fee is required. (Prerequisites: All first year PTA classes.) (2 hrs lec/2 hrs lab/0 hrs OJT)

PTA2717 Clinical Practice I 4 credits (S)

This course is the student's first of three full time clinical internships in a physical therapy facility. The student will function as a second year PTA student in the facility for 5 consecutive weeks and will be responsible for patient care compatible to the role of the PTA and skills learned. (Prerequisites: BIOL1141, PSYC1120, PSYC1135, COMM/SPCH1110 or COMM/SPCH1105, PTA2623, PTA2650, PTA2651, PTA2613, PTA2642, PTA2637, CPR and First Aid Certification, and liability insurance) (0 hrs lec/0 hrs lab/12 hrs OJT)

PTA2727 Clinical Practice II 4 credits (S)

This course is the second of three full time clinical internships in a physical therapy facility. The student will function as a second year PTA student in the facility for 5 consecutive weeks and will be responsible for patient care compatible to the role of the PTA. (Prerequisites: PTA2717, CPR Certification, and liability insurance) (0 hrs lec/0 hrs lab/12 hrs OJT)

PTA2747 Clinical Practice III 3 credits (F/S)

This course is the student's final clinical internship in a physical therapy facility. The student will function as a second year PTA student in the facility for four consecutive weeks and will be responsible for patient care compatible to the role and entry level skills of the PTA. (Prerequisites: PTA2727, CPR Certification, and liability insurance) (0 hrs lec/0 hrs lab/9 hrs OJT)

PTA2780 Physical Therapist Assistant Basic Refresher (I)

This course is designed to assist physical therapist assistants in reviewing and/or updating concepts fundamental to physical therapy as well as new theories about practice. It will also be helpful to those preparing to take the national licensure exam and those who have not actively practiced physical therapy in the recent past. (Prerequisites: Graduate of CAPTE accredited physical therapist assistant program) (2 hr lec/0 hrs lab/0 hrs OJT)

PTA2840 Professional Integration 1 credit (S)

This capstone course is designed to help PTA students transition from full-time clinical experiences to post-graduation practice. Students will review major concepts taught throughout the program and during full-time clinical experiences. Students will be expected to pass a comprehensive written examination which will help prepare them to take the national licensing exam. The course also emphasizes job-seeking skills necessary for finding employment as a PTA (Prerequisites: Concurrent enrollment in PTA2717, PTA2727, and PTA2747) (1 hr lec/0 hrs lab/0 hrs OJT)

PTA2999 Special Topics in Physical Therapist Assistant 1-3 credits (I)

Study of special topics in physical therapist assistant. Special course topics will be announced in the class schedule.

Radiologic Technology**RADT1400 Introduction to Radiography and Patient Care** 2 credits (F)

An introduction to Radiologic Technology as a career, its role in health care delivery medical ethics and legal responsibilities. Patient care aspect focuses on communication, patient care needs and handling of patients in radiology-related examinations. (Prerequisites: Enrollment in an Allied Health Program or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

RADT1415 X-ray Operations for Allied Health 2 credits (I)

This course provides basic information and knowledge of the science and art of radiography. It is intended for non-radiologic health care majors or professionals to aid in preparation for state x-ray operator licensure. (Prerequisites: Enrollment in an Allied Health Program or instructor's consent) (2 hours lec/0 hrs lab/0 hrs OJT)

RADT1453 Radiographic Procedures I 3 credits (F)

This course reviews the architectural plan of the body with emphasis on the structure and function of the skeleton. The student will learn the basics of positioning to obtain radiographs of the chest, thoracic cage, abdomen and upper extremities including shoulder girdle. The lab component will stress patient positioning and radiographic evaluation. (Prerequisites: ALTH1410 and BIOL1140) (2 hr lec/2 hrs lab/0 hrs OJT)

RADT1463 Radiographic Procedures II 4 credits (S)

A continuation of RADT1453 and a study of the anatomy and positioning of the lower extremities, hip, pelvis, spine and contrast studies of the GI and GU systems. (Prerequisites: RADT1453 concurrent with RADT1568) (3 hrs lec/2 hrs lab/0 hrs OJT)

RADT152 Image Production I 3 credits (F)

An introduction to radiation safety and x-ray exposure. This course will include study of: the prime factors of radiographic exposure with its effect on the radiographic image; anatomy and characteristics of radiographic film and film processing; methods of radiation safety; general radiographic equipment and accessories for image production. The student will calculate adjustment of various factors that control radiographic exposure. (Prerequisite: Admission to the Radiologic Technology Program. MATH0460 or placement test scores) (3 hrs lec/0 hrs lab/0 hrs OJT)

RADT1558 Clinical Radiography I 6 credits (F)

To acquaint the student with the hospital environment through supervised participation of theories presented in the classroom. Emphasis on patient care and transportation, protocol in the hospital and radiology department, identification and operation of radiographic equipment/supplies, and office and darkroom procedures. (Prerequisites: Entry into the Radiologic Technology program, State of Minnesota and/or Wisconsin background study approval) (0 hr lec/2 hr lab/15 hr OJT)

RADT1560 Image Production II 3 credits (S)
A continuation of RADT1552 with emphasis on the analysis of radiographic image quality. This course will also discuss the circuitry common to most radiographic equipment, specialized radiographic equipment, processing, radiographic film and screens. Students will be involved in solving technical problems and making technical adjustment. (Prerequisites: RADT1552) (3 hrs lec/0 hrs lab/0 hrs OJT)

RADT1568 Clinical Radiography II 8 credits (S)
This course provides the student with the opportunity to operate more independently in all areas of basic radiography. Competency testing continues as well as weekend and evening clinical internships. Exposure is given to specialized modalities in medical imaging. Clinical objectives, specific to each rotation, are found in the clinical objective handbook. No signatures are required on the objective worksheets this term. (Prerequisites: RADT1558, current State of Minnesota/Wisconsin background study approval) (0 hr lec/2 hr lab/21 hr OJT)

RADT1578 Clinical Radiography III 4 credits(Arr)
A continuation of Clinical Radiography II, this course provides the student with the opportunity to operate more independently in all areas of general radiography. Competency testing continues as well as weekend and evening clinical rotations. Exposure is given to specialized modalities in medical imaging. (Prerequisites: RADT1568) (0 hr lec/2 hr lab/9 hr OJT)

RADT2451 Specialized Procedures 1 credit (F)
This course is an introduction to specialized radiographic procedures of the circulatory system. This course will discuss the history of angiographic procedures as well as current day procedures. (Prerequisites: RADT1463 and concurrent with RADT2558) (1 hr lec/0 hrs lab/0 hrs OJT)

RADT2453 Radiographics Procedures III 2 credits (F)
A continuation of Procedures II with areas of study to include anatomy and positioning of the skull, pediatric, and geriatric radiography. An introduction to mammography, arthrography, venography and sialography will be included. (Prerequisites: RADT1463) (1.5 hrs lec/1 hr lab/0 hrs OJT)

RADT2455 Radiographic Pathology 1 credit (F/S)
This study of the disease as it relates to radiographic studies. Pathological conditions of each body system will be demonstrated using general radiology and advanced imaging modalities. Comparisons will be made between normal and abnormal anatomy due to the presence of pathology. Students will have the opportunity to tour a post-room (morgue) at one of the area hospitals. (Prerequisites: RADT1463) (1 hr lec/0 hrs lab/0 hrs OJT)

RADT2550 Radiation Biology and Protection 2 credits (F)
The study of radiation and the effects of radiation exposure on the human body. Acute and chronic responses will be discussed in regard to molecules, cells, tissues, and organs. The principles of radiation protection including the responsibility of the technologist to the patient, personnel, and public will be addressed. The regulations and regulatory commissions governing exposure of ionizing radiation to humans will also be examined. (Prerequisites: RADT1560) (2 hrs lec/0 hrs lab/0 hrs OJT)

RADT2558 Clinical Radiography IV 8 credits (F)
This course provides the student with the opportunity to operate more independently in all areas of basic radiography. Competency testing continues as well as weekend and evening clinical internships. Exposure is given to specialized modalities in medical imaging. Clinical objectives, specific to each rotation, are found in the clinical objective handbook. No signatures are required on the objective worksheets this term. (Prerequisites: RADT1578 and current State of Minnesota background study approval) (0 hrs lec/2 hrs lab/21 hrs OJT)

RADT2560 Quality Assurance in Radiologic Technology 1 credit (S)
A study of the fundamental organization and procedures of a radiologic quality assurance program. The student will perform and analyze a varied number of noninvasive quality control tests designed to evaluate the operation performance of a radiographic system. (Prerequisites: RADT1560) (1 hr lec/0 hrs lab/0 hrs OJT)

RADT2568 Clinical Radiography V 8 credits (S)
A continuation of Clinical Radiography IV, this course provides the student with the opportunity to operate more independently in all areas of basic radiography. Competency testing continues as well as weekend and evening clinical internships. Exposure is given to specialized modalities in medical imaging. (Prerequisites: RADT2558) (0 hrs lec/2 hrs lab/14 hrs OJT)

RADT2572 Directed Studies in Radiologic Technology 1 credit (S)
This course will help prepare the student for the American Registry of Radiologic Technology exam by assisting with a long term study plan, developing testing strategies, review of calculations and formulas, and mock testing. In addition, a workshop will be held to prepare the student for entry in the radiology job market. (Prerequisites: RADT2550) (1 hr lec/0 hrs lab/0 hrs OJT)

RADT2578 Clinical Radiography VI 4 credits(Arr)
A continuation of Clinical Radiography V, this course provides the student with the opportunity to operate more independently in all areas of general radiography. Competency testing continues as well as weekend and evening clinical rotations. Exposure is given to specialized modalities in medical imaging. (Prerequisites: RADT2568) (0 hrs lec/2 hrs lab/9 hrs OJT)

RADT2580 Expanded Horizons in Medical Imaging-Basics in Mammography 1 credit
Basic mammography is an introductory course on breast imaging. It is the first in the series of Expanded Horizons in Medical Imaging electives. This course focuses on basic anatomy, positioning and terminology specific to the breast. Participants will be given the opportunity to learn breast self exam techniques as a patient education tool and for personal health. Other topics include: Quality control, as mandated by the state of Minnesota; alternate modalities used for breast imaging; ARRT certification criteria in mammography. (Prerequisites: RADT 1463 and concurrent with RADT 2458.  ) (1 hr lec/0 hrs lab/0 hrs OJT)

College Level Reading = 
College Level Writing = 

RADT2999 Special Topics in Radiologic Technology 1-3 credits (I)
Study of special topics in radiologic technology. Special course topics will be announced in the class schedule.

Reading

READ0450 Reading Strategies I 3 credits (F/S)
A developmental course designed to develop basic strategies necessary for reading and learning effectively in college. (Prerequisites: Appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

READ0455 Reading and Study Strategies I 5 credits (F/S)
A developmental course designed to develop basic strategies necessary for reading and learning effectively in college. Students need a "C" or better in this course to enroll in Reading Strategies II. (Prerequisites: CPT score 31-55.) (5 hrs lec/0 hrs lab/0 hrs OJT).

READ0460 Reading Strategies II 3 credits (F/S)
A developmental course designed to provide practice in applying strategies necessary for reading and learning effectively in college. Any student who tests into READ0460 must take STSK1011. (Prerequisites: READ0450 with a grade of "C" or better, or appropriate placement test score) (3 hrs lec/0 hrs lab/0 hrs OJT)

READ0465 Reading/Study Strategies II 5 credits
A developmental course designed to provide practice in applying strategies necessary for reading and learning effectively in college. These strategies will enable the student to be successful in college level courses. (Prerequisites: READ0455 with a "C" or better, or a CPT placement score of 56 - 75.) (5 hrs lec/0 hrs lab/0 hrs OJT)

READ1450 Introduction to Critical Reading 3 credits (F/S)
A course designed to sharpen the critical thinking and reading skills of the beginning college reader through the examination of materials in the four genres most frequently encountered in college: poetry, short fiction, essays, and textbook chapters. (Prerequisites:  or READ0460/0465) (3 hrs lec/0 hrs lab/0 hrs OJT)

READ2999 Special Topics in Reading 1-3 credits (I)
Study of special topics in reading. Special course topics will be announced in the class schedule.

Respiratory Care Practitioner

RESP1400 Introduction to Respiratory Care 1 credit (F)
This course introduces students to the respiratory care profession. There will be an overview of respiratory pathophysiology and pharmacology to ready the student for clinical. (Prerequisites: Concurrent enrollment or completion of all semester 1 courses on the RCP planner or instructor's consent) (1 hr lec/0 hrs lab/0 hrs OJT)

RESP1410 Cardiopulmonary Anatomy and Physiology 4 credits (F)
This course focuses on cardiopulmonary anatomy and physiology topics pertinent to the respiratory care practi-

tioner. (Prerequisites: Concurrent enrollment or completion of all semester 1 RCP courses or instructor's consent) (4 hrs lec/0 hrs lab/0 hrs OJT)

RESP1420 Principles and Practice of Respiratory Care I 3 credits (F)
This course covers the principles and equipment used for oxygen therapy and aerosol therapy in respiratory care. A lab fee may be assessed. (Prerequisites: Concurrent enrollment in, or completion of, all semester 1 courses on the RCP planner or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

RESP1520 Principles and Practice of Respiratory Care II 3 credits (S)
This course covers the principles and equipment used for hyperinflation therapy and airway care in respiratory care. A lab fee may be assessed. (Prerequisites: Completion of all semester 1 courses on the RCP planner or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

RESP1530 Pathophysiology for RCP's 3 credits (S)
This course covers respiratory diseases with an emphasis on physical assessment of the respiratory patient. In addition, we will cover some common non-respiratory conditions. (Prerequisites: Completion of all semester 1 courses on the RCP planner or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

RESP1540 Diagnostic Testing 3 credits (F)
This course covers respiratory physiology related to pulmonary function testings and stress testing. Basic interpretation of chest x-ray and electrocardiogram will be covered. (Prerequisites: Concurrent enrollment or completion of all semester 1 RCP courses or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

RESP1558 RCP Clinical I 6 credits (S)
This course will provide the student an opportunity to integrate and practice respiratory care theory and laboratory applications in a clinical environment. (Prerequisites: Completion of all semester 1 courses on the RCP planner or instructor's consent) (0 hrs lec/6 hrs lab/9 hrs OJT)

RESP1578 RCP Refresher Clinical I 1 credit (Arr)
This course will provide the student an opportunity to integrate and practice first-year respiratory care theory and laboratory applications in a clinical environment. This course is intended for students who have stopped out of the RCP Program after having completed one semester or more of clinical courses. Before the student re-enters the clinical courses on the RCP Planner, they need to review and practice clinical procedures. (Prerequisites: Completion of one or more RCP clinical courses. Current CPR certification) (0 hrs lec/2 hrs lab/0 hrs OJT)

RESP1620 Pharmacology for RCP's 2 credits (S)
This course covers general pharmacology principles, dose calculations, and methods of administration for drugs commonly given by the respiratory care practitioner. This course will also cover drugs commonly given to the respiratory patient such as antibiotics, analgesics, cardiovascular agents, and others. (Prerequisites: Completion of all semester 1 courses on the RCP planner or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

RESP2410 Mechanical Ventilation 4 credits (F)
 This course will cover mechanical ventilation indications, physics, complications, management, monitoring, devices, and weaning. There will be discussion of advanced modes of mechanical ventilation. A lab fee may be assessed. (Prerequisites: Completion of all semester 1, 2 and 3 courses on the RCP planner or instructor's consent) (3 hrs lec/2 hrs lab/0 hrs OJT)

RESP2420 Adult Critical Care 3 credits (F)
 This course covers invasive hemodynamic monitoring and noninvasive monitoring. Chest tubes, fluid and electrolyte balance, and other critical care content will be covered. (Prerequisites: Completion of all semester 1, 2 and 3 courses on the RCP planner or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

RESP2430 Special Topics for RCP's 2 credits (F)
 This course covers pulmonary rehabilitation, home care and sub-acute care settings as it applies to respiratory care practitioners and their patients. (Prerequisites: Completion of all semester 1, 2 and 3 courses on the RCP planner or instructor's consent) (2 hrs lec/0 hrs lab/0 hrs OJT)

RESP2440 Neonatal/Pediatric Respiratory Care 3 credits (F)
 This course covers developmental anatomy and physiology, neonatal/pediatric diseases, assessment, oxygen therapy, airway care, and mechanical ventilation of the neonatal and pediatric patient. A lab fee may be assessed. (Prerequisites: Completion of all semester 1, 2 and 3 courses on the RCP planner or instructor's consent) (2 hrs lec/2 hrs lab/0 hrs OJT)

RESP2458 RCP Clinical II 6 credits (F)
 This course will provide the student an opportunity to integrate and practice respiratory care theory and laboratory applications in a clinical environment. (Prerequisites: Completion of all semester 1, 2, and 3 courses on the RCP planner or instructor's consent) (0 hrs lec/6 hrs lab/9 hrs OJT)

RESP2478 RCP Refresher Clinical II 1 credit (Arr)
 This course will provide the student an opportunity to integrate and practice second-year respiratory care theory and laboratory applications in a clinical environment. This course is intended for students who have stopped out of the RCP Program after having completed one semester or more of clinical courses. Before the student re-enters the clinical courses on the RCP Planner, they need to review and practice clinical procedures. (Prerequisites: Completion of RESP1578 and first two semester clinical courses. Current CPR certification) (0 hrs lec/2 hrs lab/0 hrs OJT)

RESP2510 Directed Studies in Respiratory Care 3 credits (S)
 This course will review respiratory care with emphasis on areas of need for administration of the self assessment exams. The course will cover advanced analysis of clinical data and integration of data into clinical management plans. The course prepares the student for the MBRC, CRTT and RRT exams they will be taking after graduation for national credentialing. The student will be required to pay for the NBRC self assessment exams and scoring.

(Prerequisites: Completion of semesters 1, 2, 3 and 4 courses on the RCP Planner or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

RESP2558 RCP Clinical III 8 credits (S)
 This course will provide the student an opportunity to integrate and practice respiratory care theory and laboratory applications in a clinical environment. (Prerequisites: Completion of semesters 1, 2, 3 and 4 courses on the RCP Planner or instructor's consent) (0 hrs lec/4 hrs lab/18 hrs OJT)

RESP2999 Special Topics in Respiratory Care Practitioner 1-3 credits (I)
 Study of special topics in respiratory care practitioner. Special course topics will be announced in the class schedule.

Supervisory Management

SMGT1400 Supervisory Leadership 3 Credits (F/S)
 This course teaches participants current principles, concepts, responsibilities and practical application skills fundamental to success as a supervisor. Students will participate in hands-on projects in class and at work dealing with topics such as leadership, communication, employee motivation, delegation, planning, team building, quality & productivity, problem-solving, organizing, and managing performance. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1405 Strategies For Personal Leadership 3 Credits (F/S)
 This course will provide students with the tools and strategies to create an increased level of personal productivity from which they can more effectively solve problems and develop strong personal and professional relationships. Students will identify and demonstrate skills specific to supervisory responsibilities such as providing feedback, collaborating with peers, resolving conflict, gaining support from others, and getting your ideas across. Students will participate in team projects, small group discussions, and will complete a personal leadership action plan as one of the required course outcomes. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1415 Leadership Development & Ethics 3 Credits (F/S)
 This course provides the learner with leadership concepts and tools to enhance and improve their ability to motivate and positively influence others. Emphasis will be placed on creating positive and powerful relationships based on principles and values. In addition to leadership concepts and skills, the ethical considerations of leadership will be discussed. Students will learn strategies and skills to effectively deal with ethical issues supervisors are faced with at work. Key areas include leadership, motivation, confidentiality, and organizational and individual behavior as they relate to issues such as sexual harassment, workplace violence, employee theft, and customer relationships. Students will participate in team projects, small group discussions, and will complete a personal leadership action plan as one of the required course outcomes. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1425 Managing Time, Change & Stress
3 Credits (F/S)

This course will enable students to develop skills and strategies that will allow them to more effectively accomplish significant objectives and keep pace with the rapid and dramatic changes in the workplace today. Students will learn to set goals, develop daily and weekly action plans, handle interruptions, delegate, and determine the relative effectiveness of traditional time management tools. Participants will learn to become a change leader by effectively identifying and overcoming resistance to change by creating a work environment where change is expected and viewed as positive. Students will also learn skills and strategies necessary to recognize and effectively manage stress in the workplace. Emphasis will be on identifying the sources of stress, understanding the physiological and psychological aspects of stress, and on creating positive ways to reduce stress and minimize the potential for workplace burnout. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1455 Leadership Capstone Project
2 Credits (F/S)

This course is designed to allow the student to create and implement a workplace project that utilizes knowledge, tools, and skills specific to completed Leadership courses. Objectives of the Capstone Project must be created by the student to enhance their workplace skills and must directly relate to course content in the Leadership Certificate component of the Supervisory Management AAS degree program. The "Leadership Capstone Project" is to be designed by the student for actual application at their place of work during the semester they are enrolled in the Leadership courses. The student will complete the project and make a formal presentation at the end of the semester. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1505 Quality & Improvement 3 Credits (F/S)

Students will learn principles and use tools for quality and continuous improvement. The course will clarify the importance of the supervisor's role and responsibilities related to quality including identifying customer needs, applying tools and techniques for improving systems and processes, developing a quality training plan for work group members, and enhancing work group commitment to quality. Students will participate in a group to complete a quality/continuous improvement course project. This course also provides students with concepts and tools to increase organizational effectiveness and customer satisfaction. Emphasis will be placed on creating a culture supportive of making customer focused decisions and motivating others to service excellence. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1515 Building & Leading Effective Work Teams
3 Credits (F/S)

This course provides students with concepts and strategies to build and lead effective work teams. Selection of team members, team compatible behaviors and characteristics, and the stages of team development will be discussed. Focus will be placed on participative leadership, drawing on the knowledge and expertise of individuals and teams within an organization, yielding higher participation, productivity and satisfaction. This course also examines the beneficial aspects of valuing and managing diversity characteristics such as culture, race, sex, age, and ability in the workplace. Students will assess personal assumptions, bias-

es and stereotypes and their impact on performance. Students will develop strategies and action steps to eliminate barriers to equal access and professional growth in order to enable every employee to reach their potential. Students will participate in team projects. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1525 Project Management 3 Credits (F/S)

Students will learn how to construct and use several project planning and control tools such as Critical Path Method, Work Breakdown Structure, PERT Diagrams and Gantt Charts. Students will plan a relevant work project using these project management tools as one of the required course outcomes. This course is designed to teach students how to plan, prepare, organize, conduct, and evaluate effective meetings and effectively and accurately document performance and communicate with employees using a variety of written formats. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1535 Creative Problem Solving 3 Credits (F/S)

In this course students will learn a systematic approach to solving workplace problems by using tools for gathering, analyzing and evaluating data. Students will also learn techniques to improve creativity, group participation, and for gaining approval and support for successful implementation of solutions. Students will participate in a group to complete a course problem-solving project. This course also teaches students how to develop more creative and innovative solutions to difficult and complex problems. Students will learn to find fresh insight and new perspectives for positively impacting their leadership role at work. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1555 Quality Capstone Project 2 Credits (F/S)

This course is designed to allow the student to create and implement a workplace project that utilizes knowledge, tools, and skills specific to completed Quality courses. Objectives of the Capstone Project must be created by the student to enhance their workplace skills and must directly relate to course content in the Quality Certificate component of the Supervisory Management AAS degree program. The "Quality Capstone Project" is to be designed by the student for actual application at their place of work during the semester they are enrolled in the Quality courses. The student will complete the project and make a formal presentation at the end of the semester. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1605 Performance Management & Coaching
3 Credits (F/S)

This course covers techniques for improving employee performance and the skills necessary to coach, mentor, tutor, counsel, and confront performance in order to help employees become more committed to performance objectives and increase productivity. Students will learn procedures for setting performance standards, measuring results, and discussing performance. Students will also learn skills necessary for conducting an effective performance review including how to plan for a performance review meeting, how to develop a performance improvement plan, how to provide for periodic progress reviews and how to practice interim coaching skills. Students will practice setting, communicating, and coaching to performance expectations. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1615 Employment Law & Occupational Safety
3 Credits (F/S)

This course allows students to examine workplace issues impacting supervisory responsibilities such as employee hiring decisions, discrimination, unemployment compensation, workers' compensation, Fair Labor Standards Act, employee safety and health, regulations and guidelines set by OSHA, MPCA, and DOT for maintaining worker safety and rules compliance in the workplace, workplace harassment, documentation, and termination. This course also provides students with strategies and skills to effectively recruit, interview, and select the best person from a field of qualified candidates. Methods and techniques will be presented to insure legal and objective and fair employee selection. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1625 Budget Analysis & Cost Control
3 Credits (F/S)

This course is specifically designed to provide students with the management planning and control methods necessary for supervisors to create department budgets and control department costs. These skills are essential for supervisors to be able to understand the role of budgeting in management decision making and use good management planning and control techniques. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1635 Employee Training & Development
3 Credits (F/S)

This course provides students with the skills and strategies necessary to assess training needs, design and prepare a training plan, deliver a training session, and assess transfer of the training. Students will plan, design, and present an actual training session as a course requirement. Particular emphasis will be placed on selection of effective training methods, multiple intelligences learning methodology, and training facilitation. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1655 Performance Improvement Capstone
2 Credits (F/S)

This course is designed to allow the student to create and implement a workplace project that utilizes knowledge, tools, and skills specific to completed HRD courses. Objectives of the Capstone Project must be created by the student to enhance their workplace skills and must directly relate to course content in the Human Resource Development Certificate component of the Supervisory Management AAS degree program. The "HRD Capstone Project" is to be designed by the student for actual application at their place of work during the semester they are enrolled in the HRD courses. The student will complete the project and make a formal presentation at the end of the semester. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SMGT1700 Personal Portfolio Design 1 Credit (F/S)

This course will guide students through the creation of an individualized degree plan for the Supervisory Management AAS degree program. It is designed to be the first course taken in the program. Students will assess previous education, prior learning from work and life experiences, and develop a portfolio of prior learning. (Prerequisites:  ) (1 hr lec/0 hrs lab/0 hrs OJT)

SMGT1705 Accelerated Learning Concepts & Strategies
2 Credits (F/S)

This course will introduce students to accelerated learning methodology, multiple intelligences theory, study group learning strategies, brain based teaching, and provide them with strategies and skills to successfully complete a course of study delivered via accelerated learning methods. Students will work independently and in study groups practicing accelerated learning techniques and complete required assignments and projects. Students will learn to design accelerated methods into workplace training to increase retention and reduce training time. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SMGT2999 Special Topics in Supervisory Management
1-3 credits (I)

Study of special topics in supervisory management. Special course topics will be announced in the class schedule.

Sociology**SOC1111 Introduction to Sociology** 3 credits (F/S)

This course involves both an explanation of and active practice in using the sociological perspective to examine the world around us. It introduces Sociology as a discipline and sociological ways of understanding human social interaction and processes such as socialization, deviance, culture/society, and social change. This class teaches the use of Sociology in class via small-group exercises and the use of computers to explore questions about the social world. Students who have already taken SOC110 may not register for credit. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavior Sciences, and (7) Human Diversity. (Prerequisites:  )] as identified in Placement Test results) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1112 Global Sociology 3 credits (F/S)

This course uses a global perspective to examine the structure of societies and the interdependence of nations. It introduces major social institutions (family, education, political and economic systems, religion and medicine) in the U.S. and a range of societies around the world. In this course, students analyze international differences and similarities and the problems and opportunities these create. MTC goal areas: (5B) Social and Behavioral Sciences and (8) Global Perspective. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1114 Introduction to Criminal Justice
3 credits (F/S)

This course will explore the American criminal justice system through analysis of its three component parts: law enforcement, the courts, and corrections. MTC goal areas: (2) Critical Thinking, (5) History and Social and Behavioral Sciences, and (9) Ethic and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1116 Introduction to Corrections 3 credits (F/S)

This course will examine the philosophy and history of punishment from the Middle Ages to modern times. The impact of theories concerning corporal punishment, incapacitation, isolation, retribution, rehabilitation, and non-traditional forms of punishment will be explored in relationship to the development of corrections in the United States. Models of treatment such as social, psychological, medical, behavioral, and biological will be evaluated and compared for effectiveness, as well program models such as community treatment centers, electronic monitoring, home confinement, probation, parole, and supervised release. Judicial, political, and societal factors will be analyzed for their on-going influences on change within the corrections system. (Prerequisites: SOC1111, SOC1112, and ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1118 Correction Law 3 credits (F/S)

This course will address legal and constitutional issues that correctional workers are confronted with on a daily basis. The class will investigate these issues and how it may affect staff and offenders in the private or public sector in local, state, or federal facilities and alternative programs. The course will investigate how the Constitution establishes rights for both state and offenders and how legal interpretations of the Constitution and other laws may impact a correctional setting. Public and political influences on the law and its effect on correctional programs will be addressed. Forms of legal relief for both offenders and staff will be a focus of the course. (Prerequisites: SOC1114, SOC1116, and ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1120 Criminal Trials: Law and Procedure 3 credits (S)

This class will explore the development of the American legal system addressing the philosophy and history of legal sanctions in the American criminal justice system. The course will focus on the prosecution and defense of crime through the analysis of the classification, definition of crime/laws, and the elements of a crime. The analysis of the prosecution and a finding of guilt will lead to the study of the various common defense strategies used by defendants. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1125 Social Deviance 3 credits (F/S)

In this course students will explore the origins of deviance and the scope of what is considered deviant, answering the question: is anything inherently deviant? Students will examine deviant subcultures, the medicalization of deviance, aspirations toward deviance by some members of society, and the processes involved in managing a deviant identity. The course explores the various theories of deviance, analyzes the impact of social power on deviant labeling, and integrates a cross-culture perspective. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavior Sciences, and (8) Global Perspective. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1130 Juvenile Delinquency 3 credits (S)

This course will explore the concepts of childhood and delinquency and their social construction. Students will examine the measurement of delinquent behavior along with competing theories of delinquency. The course addresses the relationship between delinquency and various influences such as gender, family, peers, and schools.

Students will evaluate programs for the prevention and treatment of delinquency, and examine the development and operation of the juvenile justice system. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1135 Introduction to African-American Culture 2 credits (F/S)

This course is an introduction to the values, traditions, and cultures of the African-American population within the United States. It will explore current views and issues that relate to the lifestyle of the African-American. MTC goal areas: (5) Social Sciences and (7) Human Diversity. (Prerequisites: ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SOC1140 Marriages and Families 3 credits (F/S)

This course is an examination of marriage and family as a form of social organization existing within a larger social system. Both the larger social system and differences in individuals are emphasized as factors that create wide diversity in families within each culture and across cultures. Cultural beliefs about and perceptions of "the family" i.e., myths, ideals, and values are critically analyzed. Diverse families are studied in their functioning around intimacy, work, children, violence, marriage, divorce, economics, race, and gender. MTC goals (5) History and the Social and Behavioral Sciences and (7) Human Diversity. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1145 Race, Class, and Gender 3 credits (F/S)

This course uses the sociological perspective to explore issues of race, class, and gender as they intersect in the lives of individuals and in society at large. It addresses both disadvantage and privilege and concludes with an examination of social activism. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1150 Introduction to Women's Studies 3 credits (F/S)

This course introduces women's studies by examining the writings of a diverse array of women about topics central to women's studies: stratification/oppression; feminist theories and activism; violence against women; women's history; woman's work; and women's poetry, music, art, theater, literature, and spirituality. It emphasizes the diversity of women's experience and perspectives based on age, race, class, disability/ability, sexual/affectional orientation, and global position. MTC goal areas: (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1155 Human Sexuality 3 credits (F/S)

This course is an introduction to human sexuality as a social behavior in a social context, influenced by both biology and culture. Class discussion examines cross-cultural sexual variation, sexual anatomy and functioning, sexual coercion, commercialization, and issues related to sexual orientation, sexual health, variations in sexual behavior within a culture, sexual abuse. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1160 The Social Impact of Alcohol in Families
2 credits (F/S)

This course examines the social context of alcohol abuse in families. It will focus on the family interactions including role playing, labeling, and survival strategies used by family members. Finally, the course will investigate broader social causes and consequences of alcohol use. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SOC1165 Patterns of Domestic Violence
3 credits (F/S)

This course examines the social context of violence in a domestic setting. It focuses on the commonalities in strategies used by perpetrators of violence and survival mechanisms common to those victimized. The course introduces local domestic violence services. Finally, the course connects students with state and national-level policy debates and legislative initiatives dealing with domestic violence. MTC goal areas: (5B) Social Sciences, (9) Ethic and Civic Responsibilities and (2) Critical Thinking. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC1175 Introduction to Gerontology
3 credits (F/S)

This course presents a behavioral science approach to the emerging complex discipline of gerontology using the biopscho-social model. The history, development, and growth of gerontology, including significant contributions from several academic disciplines will be examined. Gerontology is the scientific study of the basic theories, principles, ideas and research about the normal aging process and later life. The course will emphasize enhancing the quality of later life and will distinguish between aging changes and changes related to chronic diseases and earlier lifestyle choices. The course will foster an appreciation of human diversity and an understanding of cross-cultural issues in aging. MTC goal areas: (5) Social Sciences and (7) Human Diversity. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2120 Social Problems
3 credits (F/S)

This course uses the topic of social problems to teach sociological concepts and processes coupled with civic responsibility. It examines a range of social problems and the diverse views of the common good that affect our perceptions of these problems. It encourages students to understand their own and others' positions and to define social justice in light of those positions. MTC goal areas: (5) History and the Social and Behavioral Sciences, and (9) Ethical and Civic Responsibility. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2121 Social Solutions: The Sociology of Positive Social Change
3 credits (F/S)

The course uses the study of social solutions to teach sociological concepts and processes. It examines the ways in which people have effectively implemented proactive social change. It focuses on the understanding of both sociological research and the social activism popular press. The course utilizes a global perspective on solutions to social dilemmas and case studies of positive social action resulting in social change. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (8) Global Perspective. (Prerequisites:   and college level study skills) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2123 Human Society and the Natural Environment
3 credits (F/S)

This course examines the relationship of people to their environment from a social and behavioral science perspective. It explores the impact of socio-cultural systems on the bio-physical environment and focuses on alternative solutions to the environmental challenges caused by individual social behaviors and broader societal policies. This course requires a \$5 per credit personal property fee. MTC goal areas: (5B) Social and Behavioral Sciences, and (10) People and Environment. (Prerequisites:   and SOC 1111) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2170 Sociology of Birth and Death
3 credits (I)

This course uses the topics of birth and death to teach sociological concepts and processes. It is an exploration of the social context in which birth and death happen. It examines the beliefs, attitudes, behavioral expectations, and technology surrounding birth and death in different historical periods and different cultures. The course focuses on current U.S. birth and death practices and movements toward reform. MTC goal areas: (2) Critical Thinking and (5) History and the Social and Behavioral Sciences. (Prerequisites:  , and college level study skills) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2171 Sociology of Sport
3 credits (I)

This course uses sports and athletics in society to teach sociological concepts and processes. We will consider how sport reflects the norms, values, and practices of other social institutions, such as the family, school, politics, the economy, and the media. We will also analyze how sport fosters inequity or promotes social mobility for groups of individuals in the population. We will examine how sport can encourage resistance and conflict, or stimulate social change beyond the world of sport. We will examine the changing significance of sport throughout history, and compare the function of sport cross-culturally. MTC goal areas: (2) Critical Thinking, (5) History and the Social and Behavioral Sciences, and (7) Human Diversity. (Prerequisites:   and college level study skills) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2177 Community Service in Corrections
3 credits (S)

This course is a formal service learning class. It is meant to be taken just before the completion of the Corrections Certificate. It requires students to provide service to a corrections-related agency for six hours each week and to participate in classroom group analyses of the service experience for three hours each week. The goal of the course is to integrate the provision of community service with a careful academic examination of the experience. (Prerequisites: Instructor's consent.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SOC2779 Community Service Collaboration
1-2 credits (F/S)

This course is designed to engage students in providing service to identified individuals or groups in order to facilitate the accomplishment of specific learning outcomes. MTC goal areas: (9) Ethical & Civic. (Prerequisites: Enroll concurrently with MSC 2999, Intro to Teaching or SOC 1145, Race, Class and Gender.  ) (1-2 hrs lec/0 hrs lab/0 hrs OJT)

SOC2999 Special Topics in Sociology 1-3 credits (I)
Study of special topics in sociology. Special course topics will be announced in the class schedule.

Spanish

SPAN1010 Beginning Spanish I 5 credits (F)
Beginning Spanish is a grammatical approach to introductory vocabulary and verb tenses with emphasis on vocabulary building, listening comprehension, verbal response and writing skills. MTC goal areas: (8) Global Perspective. (Prerequisites:  ) (5 hrs lec/0 hrs lab/0 hrs OJT)

SPAN1020 Beginning Spanish II 5 credits (S)
A continuation of SPAN1010, a first course grammatical approach. (Prerequisites: SPAN1010 or instructor's consent) MTC goal areas: (8) Global Perspective. (5 hrs lec/0 hrs lab/0 hrs OJT)

SPAN1023 Spanish for Health Professionals I 3 credits
Spanish for Health Professionals I is designed to introduce basic language skills with a medical emphasis to enable the medical community and patient to understand each other. No previous study of Spanish is required. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SPAN1025 Spanish for Health Professional II 3 credits
A continuation of Spanish for Health Professionals I. Students will continue to develop basic language skills with a medical emphasis. (Prerequisites: SPAN1023 or instructor's consent.  )

SPAN1800 Spanish Abroad-Mexico 2 credits (S)
A cultural study tour in Mexico. Students are introduced to the meaning of global citizenship through on-site experiences of the country's art, history, anthropology, and literature. The course focus may vary to reflect the region(s) visited. Offered upon sufficient demand. This course may be repeated for up to 6 credits. MTC goal areas: (6) Humanities and Fine Arts and (8) Global Perspectives. Offered as pass/no credit only. (Prerequisites:  ) (2 hrs lec/0 hrs lab/0 hrs OJT)

SPAN2010 Intermediate Spanish I 3 credits (F)
A grammatical approach to intermediate level reading, writing, listening and speaking. Readings deal with social and cultural topics of Spanish speaking countries with emphasis on vocabulary building. MTC goal areas: (6) Humanities and Fine Arts and (8) Global Perspectives. (Prerequisites: SPAN1020 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

SPAN2020 Intermediate Spanish II 3 credits (S)
Intensified study of the Spanish language through listening, speaking and composition. MTC goal areas: (6) Humanities and Fine Arts and (8) Global Perspective. (Prerequisites: SPAN2010 or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

SPAN2050 Conversational Spanish 3 credits (I)
The topics of discussion and vocabulary building are based on current events and issues in the Hispanic and European populations. Offered upon sufficient demand. May be

repeated for up to 6 credits. MTC goal areas: (6) Humanities and Fine Arts and (8) Global Perspectives. (Prerequisites: SPAN 2020 or instructor's consent.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SPAN2055 Literature and Composition 3 credits
In this course the students will further develop their reading and writing skills in Spanish through selected literary texts and assigned compositions. The course will incorporate grammatical and communicational approaches. MTC goal areas: (7) Humanities and (8) Global Perspectives. (Prerequisites: SPAN2020 or instructor's consent.  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

SPAN2999 Special Topics in Spanish 1-3 credits (I)
Study of special topics in Spanish. Special course topics will be announced in the class schedule.

Study Skills

STSK0451 Basic Study Skills 3 credits (F/S)
A fundamental course designed to develop basic study skills. (Prerequisites: Appropriate placement test score in reading) (3 hrs lec/0 hrs lab/0 hrs)

STSK1011 College Survival 3 credits (F/S)
This course provides both new and returning students with specific skills and strategies needed to achieve academic goals with greater success, and assist them in the transition to college life. Students are introduced to a variety of topics critical to student success: time management, setting priorities, learning styles, campus resources, critical thinking, diversity, motivation, and test-taking skills. (Prerequisites: ) (3 hrs lec/0 hrs lab/0 hrs OJT)

STSK2000 Credit-based Peer Tutoring 2 credits (F/S)
This course is designed to provide training in the knowledge and fundamental skills useful in diverse academic disciplines. These include: teaching, helping, communication, and problem-solving skills. As a component of the Tutor Training course and tutor practicum, each tutor examines his or her own beliefs and philosophy of ethics regarding tutoring, as well as materials to be included in a tutoring portfolio. These portfolios may be used in job interviews, applications for further education, and for requests for recommendations for employment. Students who successfully complete this course are awarded Level 1 CRLA tutor certification. (Prerequisites: "B" or above average in the discipline which the student wants to tutor. Overall GPA 2.5 and 30 college credits.  )] and/or math) (2 hrs lec/0 hrs lab/0 hrs OJT)

STSK2999 Special Topics in Study Skills 1-3 credits (I)
Study of special topics in study skills. Special course topics will be announced in the class schedule.

Surgical Technology

SURG1400 Pharmacology for the Surgical Technologist 2 credits (F)

This course is designed to provide knowledge of various routes of drug administration, effects, and side effects. It will encompass a comprehensive knowledge of the many classifications of drugs. Also included will be instruction in the values for fluid and weight measures. Emphasis will be placed on legal and safety aspects of drug administration. (Prerequisites: All pre-technical course requirements. Concurrent enrollment in SURG1411 and SURG1412) (2 hrs lec/0 hrs lab/0 hrs OJT)

SURG1411 Operating Room Practice 4 credits (F)

This twelve-week course will provide an overview of the total operating room setting as it relates to the hospital and patient. It will encompass comprehensive knowledge of aseptic technique as it relates to the surgical setting. The student will have an opportunity to observe and demonstrate fundamental clinical operating room practice. (Prerequisites: All pre-technical course requirements. Concurrent enrollment in SURG1411 and SURG1412) (0 hrs lec/11.5 hrs per week lab/0 hrs OJT)

SURG1412 Operating Room Theory 5 credits (F)

This course will provide an overview of the total operating room setting as it relates to the hospital and patient. It will encompass a comprehensive knowledge of aseptic technique as it relates to the surgical setting. The student will develop an understanding of natural body defense mechanisms along with methods by which infectious diseases are transmitted, recognized, prevented and treated. The course will include information in relation to robotics, physics and electricity as it relates to the operating room setting. (Prerequisites: All pre-technical course requirements, and concurrent enrollment in SURG1400 and SURG1411) (7 hrs lec/0 hrs lab/0 hrs OJT)

SURG1420 Operating Room Lab I 4 credits (F)

In this five-week clinical laboratory course, the student will assist with selected procedures in a hospital setting. The student will implement skills learned in prior Surgical Technology Theory and lab courses. (Prerequisites: All pre-technical course requirements. SURG1411 and SURG1412) (0 hrs lec/24 hrs lab/0 hrs OJT)

SURG1428 Operating Room Procedures I 2 credits (F)

This five-week course introduces concepts to basic procedures performed in the operating room. Included in this course is: anatomy and physiology, pathophysiology, diagnostic procedures, instrumentation and the perioperative process. (Prerequisites: SURG1400, SURG1411, SURG1412. Concurrent enrollment in SURG1420) (6 hrs lec/0 hrs lab/0 hrs OJT)

SURG1520 Operating Room Lab II 12 credits (S)

This is an advanced clinical lab course. The student will assist with additional selected procedures in a hospital setting. The student will implement skills learned in prior surgical technology theory and lab courses. (Prerequisites: All semester II courses) (0 hrs lec/24 hrs lab/0 hrs OJT)

SURG1528 Operating Room Procedures II 6 credits (S)

This course is a sequel to SURG1428 Operating Room Procedures I. This course deals with specialized surgical procedures. Included will be anatomy and physiology, pathophysiology, diagnostic procedures, instrumentation and the perioperative process. (Prerequisites: All semester II courses) (6 hrs lec/0 hrs lab/0 hrs OJT)

SURG2999 Special Topics in Surgical Technology 1-3 credits (I)

Study of special topics in surgical technology. Special course topics will be announced in the class schedule.

Truck Driving (Over-the-Road)

TDT1800 Basic Vehicle Operation and Control 7 credits (F/S)

This course covers basic instruction in truck-driving techniques, procedures, vehicle inspection and DOT regulations. (Prerequisites: Students must be able to pass and possess a Class A CDL Permit and to pass a DOT physical and drug screening) (48 hrs lec/128 hrs lab/0 hrs OJT)

TDT1830 Advanced Driving Techniques 2 credits (F/S)

This course covers defensive driving techniques and opportunity to practice driving skills in an unsupervised setting. (Prerequisites: Passed the students respective state Class A CDL Road test) (8 hrs lec/56 hrs lab/0 hrs OJT)

TDT1845 Class B Truck Driving 2 credit (F/S)

A Class B driving license will enable a student to find employment in the transportation industry operating a single vehicle CMV. (Prerequisites: Class D driver's license; pass a DOT physical and drug screening.) (1 hrs lec/2 hrs lab/0 hrs OJT)

TDT1850 Truck Driving Internship 4-6 credits (F/S)

This course provides the student with work site experience in which skills and knowledge learned in previous courses may be applied. These internship experiences include safety procedures, personnel procedures, company organization and other employer expectations. Technical skills and knowledge can include Trip Planning, Customer Relations, Dispatch Procedures, and Company policies. (Prerequisites: DOT qualified with a Class A CDL and/or instructor's consent) (0 hrs lec/0 hrs lab/12-18 hrs OJT)

Theater

THTR1100 Theater Production 1 credit (F/S)

A course with supervised practical training in performance and technical production through participation in Lake Superior Theater productions. One credit each semester, but may be repeated six times for a total of six credits. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (1 hr lec/0 hrs lab/0 hrs OJT)

THTR1110 Stage Lighting 3 credits (F/S)

This course is a basic course in stage lighting. Practical experience as well as theory is emphasized. Students will work on the college plays. MTC goal area: (6) humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1115 Sound Design 3 credits (I)

This course is an introduction to sound design, sound equipment, and effective sound techniques for the stage performance. Students will work with college plays. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1120 Stage Makeup 3 credits (I)

This course is a series of lecture/demonstrations employing the principles of stage makeup for the stage. Different materials and applications will be studied as well as make-up procedures leading to effective characterization. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1125 Costume Construction 3 credits (I)

This course is an introduction to basic techniques, materials, and equipment used to build costumes for the stage. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1130 Set Design 3 credits (F)

An introduction to the art of scene design for the theater. Students will gain theoretical and practical knowledge in the visual presentation of a play, as well as, gain an overview into this specialized art form. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1135 Stage Craft 3 credits (F)

This course is an introduction to the methods of planning, constructing, painting, and shifting stage scenery. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1200 Introduction to the Theater 3 credits (F)

This course examines theater from its early beginnings to its contemporary form, including architecture, scenery, lighting, costuming, literature, criticism, acting, and directing. MTC goal area: (2) Critical Thinking and (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1211 Acting I 3 credits (F/S)

This course introduces the student to the process of exploring the inner and outer resources of the beginning actor and bringing these resources to bear upon the art of creating a believable stage image. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites: None) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1212 Acting II 3 credits (F/S)

This is an intermediate course in acting for the stage. Emphasis is placed on psychological as well as technical approaches to the actors' craft/art. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  )], THTR1211, or instructor's consent) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1240 Introduction to Stage Directing 3 credits (S)

This is an introductory course in stage directing. Emphasis is placed on script selection, research, casting, rehearsing, and play production. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  ) (3 hrs lec/0 hrs lab/0 hrs OJT)

THTR1300 Directing Workshop 1-3 credits (I)

This is an advanced theater course intended for the student who is interested in directing for the theater. This course may be taken after course preparation or other significant experience in the theater. MTC goal area: (6) Humanities and Fine Arts. (Prerequisites:  ) or instructor's consent) (1-3 hrs lec/0 hrs lab/0 hrs OJT)

THTR2999 Special Topics in Theater 1-3 credits (I)

Study of special topics in theater. Special course topics will be announced in the class schedule.

Selected College Policies



Nondiscrimination in Employment & Education Opportunity Policy: 1B.1

Lake Superior College is committed to a policy of nondiscrimination in employment and education opportunity. No person shall be discriminated against in the terms and conditions of employment, personnel practices, or access to and participation in, programs, services, and activities with regard to race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission as defined by law.

Harassment of an individual or group on the basis of race, sex, color, creed, religion, age, national origin, disability, marital status, status with regard to public assistance, sexual orientation, or membership or activity in a local commission has no place in a learning or work environment and is prohibited. Sexual violence has no place in a learning or work environment. Further, Lake Superior College shall work to eliminate violence in all its forms.

This policy is directed at verbal and physical conduct that constitutes discrimination/harassment under state and federal law and is not directed at the content of speech. In cases in which verbal statements and other forms of expression are involved, Lake Superior College will give due consideration to an individual's constitutionally protected right to free speech and academic freedom. The college has established a process to review complaints of discrimination/ harassment or sexual violence.

Racial Discrimination/Harassment

Part 1. Definitions.

Subpart A. Racial discrimination is prohibited by state and federal law. Racial discrimination is defined as conduct that is directed at an individual because of his/her race, color, or national origin or that of his/her spouse and that subjects the individual to different treatment by agents or employees so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the system or colleges and universities or otherwise adversely affects the individual's employment or education.

Subpart B. Racial harassment is a form of race discrimination which is prohibited by state and federal law.

Racial harassment is defined as verbal or physical conduct that is directed at an individual because of his/her race, color, or national origin or that of his/her spouse and that is sufficiently severe, pervasive, or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Racial harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with other persons having business at or visiting the educational environment.

Sex Discrimination/Harassment and Violence

Part 2. Definitions.

Subpart A. Sex discrimination is prohibited by state and federal law. Sex discrimination is defined as conduct that is directed at an individual because of his/her gender or that of his/her spouse and that subjects the individual to different treatment so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the system or colleges and universities or otherwise adversely affects the individual's employment or education.

Subpart B. Sexual harassment is a form of sex discrimination which is prohibited by state and federal law. Sexual harassment is defined as unwelcomed sexual advances, requests for sexual favors, sexually motivated physical conduct, and other verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education, evaluation of a student's academic performance, or term or condition of participation in student activities or in other events or activities sanctioned by the college or university; or
2. Submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions or other decisions about participation in student activities or other events or activities sanctioned by the college or university; or
3. Such conduct has the purpose or effect of threatening an individual's employment; interfering with an individual's work or academic performance; or creating an intimidating, hostile, or offensive work or educational environment.

Sexual harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student to student, employee to employee, and other persons having business with or visiting the educational environment. Sexual harassment may occur when it is directed at members of the opposite gender or when it is directed at members of the same gender. It includes, but is not limited to:

- unwelcomed pressure for sexual activity;
- unwelcomed demands for sexual favors or promises of preferential treatment with regard to an individual's employment or educational status accompanied by implied or overt threats concerning an individual's employment or educational status;
- unwelcomed behavior or words of a sexual nature directed at an individual because of gender; or sexually motivated or inappropriate patting, pinching, or physical contact; physical contact may be appropriate, if necessary to restrain individuals to avoid physical harm to persons or property.

Subpart C. Sexual violence: Acts of sexual violence are criminal behaviors and create an environment contrary to the goals and missions of the system and colleges and universities. Acts of sexual violence include:

1. Forcible acts, which include non-consensual sexual contact, and/or sexual contact in which the victim is incapable of giving consent (such as when the complainant is under the influence of alcohol or drugs);

2. Nonforcible sex acts such as incest and statutory rape; and
3. The threat of an act of sexual violence. Sexual violence may include, but is not limited to:
 - * touching, patting, grabbing, or pinching another person's intimate parts, whether that person is of the same sex or the opposite sex;
 - * coercing, forcing, or attempting to coerce or force the touching of anyone's intimate parts;
 - * coercing, forcing, or attempting to coerce or force sexual intercourse or a sexual act on another; or
 - * threatening to force or coerce sexual acts, including the touching of intimate parts or intercourse, on another.

Subpart D. Sexual harassment and violence as sexual abuse. Under certain circumstances, sexual harassment or violence may constitute sexual abuse according to Minnesota law. In such situations the college shall comply with the reporting requirements in M.S. Section 626.556 (reporting of maltreatment of minors) and MS Section 626.557 (Vulnerable Adult Protection Act). Nothing in this policy will prohibit the college from taking immediate action to protect victims of alleged sexual abuse.

Subpart E. Nonconsensual Relationships. Substantial risks are involved even in seemingly consensual romantic/sexual relationships where a power differential exists between the involved parties. The respect and trust accorded a faculty member or other employee by a student, as well as the power exercised by faculty in giving grades, advice, praise, recommendations, opportunities for further study or other forms of advancement may greatly diminish the student's actual freedom of choice concerning the relationship. Similarly, the authority of the supervisor to hire, fire, evaluate performance, reward, make recommendations, assign and oversee the work activities of employees may interfere with the employee's ability to choose freely in the relationship. Further, it is inherently risky where age, background, stature, credentials or other characteristics contribute to the perception that a power differential exists between the involved parties which limits the student or employee's ability to make informed choices about the relationship.

Claims of a consensual romantic/sexual relationship will not protect individuals from sexual harassment charges nor guarantee a successful defense if charges are made. It is the faculty member, supervisor or staff who will bear the burden of accountability because of his/her special power and responsibility, and it may be exceedingly difficult to use mutual consent as a defense. Therefore, all employees should be aware of the risks involved in entering into a romantic/sexual relationship where there is a superior/subordinate relationship.

Sexual Orientation Discrimination/Harassment

Part 3. Definitions.

Subpart A. Sexual orientation discrimination is prohibited by state law. Sexual orientation discrimination is defined as conduct that is directed at an individual because of his/her sexual orientation and that subjects the individual to different treatment by agents or employees so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the system, colleges and universities or otherwise adversely affects the individual's employment or education.

Subpart B. Sexual orientation harassment is a form of sexual orientation discrimination which is prohibited by state law. Sexual orientation harassment is defined as verbal or physical conduct that is directed at an individual because of his/her sexual orientation and that

is sufficiently severe, pervasive or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Sexual orientation harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with other persons having business at or visiting the educational environment.

Disability Discrimination/Harassment

Part 4. Definitions.

Subpart A. Disability discrimination is prohibited by state and federal law. Disability discrimination as defined by law is conduct that is directed at an individual because of his/her mental/physical disability or that of his/her spouse and that subjects the individual to different treatment by agents or employees without legitimate non-discriminatory reason so as to interfere with or limit the ability of the individual to participate in, or benefit from, the services, activities, or privileges provided by the college or otherwise adversely affects the individual's employment or education.

Subpart B. Disability harassment is a form of discrimination which is prohibited by state and federal law. Disability harassment is defined as verbal or physical conduct that is directed at an individual because of his/her mental/physical disability or that of his/her spouse and that is sufficiently severe, pervasive, or persistent so as to have the purpose or effect of creating a hostile work or educational environment. Disability harassment may occur in a variety of relationships, including faculty and student, supervisor and employee, student and student, staff and student, employee and employee, and other relationships with other persons having business at or visiting the educational environment.

Procedure - Report/Complaint of Discrimination/Harassment Investigation and Resolution Policy: 1B.1.1

Part 1. Procedure objective.

This procedure is designed to further implement Lake Superior College policies relating to non-discrimination by providing a process through which individuals alleging violation of system non-discrimination policies may pursue a complaint. This includes allegations of discrimination or harassment based on sex, race, age, disability, color, creed, national origin, religion, sexual orientation, marital status, status with regard to public assistance or membership or activity in a local commission. This procedure is not applicable to allegations of sexual violence which should be handled under appropriate system and college policies and procedures.

A single act of discrimination may be based on more than one protected class status. For example, discrimination based on anti-Semitism may relate to religion, national origin, or both; discrimination against a pregnant woman might be based on sex, marital status, or both.

This procedure shall apply to all individuals affiliated with Lake Superior College, including its students, employees, and applicants for employment, and is intended to protect the rights and privacy of both the complainant and respondent and other involved individuals, as well as to prevent retaliation/reprisal. Individuals who violate this procedure shall be subject to disciplinary or other corrective action.

Not every act that may be offensive to an individual or group constitutes discrimination or harassment. In determining whether discrimination or harassment has occurred, the totality of the circumstances surrounding the incident must be carefully reviewed and due consideration must be given to the protection of individual rights, freedom of speech, academic freedom and advocacy.

The Colleges shall maintain and encourage full freedom, within the law, of expression, inquiry, teaching, and research. Academic freedom comes with a responsibility that all members of our education community benefit from it without intimidation, exploitation, or coercion. Discrimination and harassment are not within the protections of academic freedom.

Part 2. Definitions

Subpart A . Designated officer. A designated officer is an individual designated by the President to be primarily responsible for investigating or coordinating the investigation of reports and complaints of discrimination/harassment in accordance with this procedure. Contact information for Lake Superior College's Designated Officer is as follows: Mary Nienaber, Director of Human Resources, E2034, 218-733-7626, m.nienaber@lsc.mnscu.edu.

Subpart B. Decision-making authority. A decision-maker (appropriate Dean or Vice-President) is an individual designated by the President to review investigative reports, to make findings whether the discrimination/harassment policies have been violated based upon the investigation and other measures deemed necessary to reach a decision, and to determine the appropriate action for the institution to take based upon the findings.

Part 3. Reporting incidents of discrimination/harassment.

Subpart A. Reporting an incident. The College encourages any individual, including any student, employee, applicant for employment, or person eligible for employment (as defined by Minnesota Statutes section 43A.02), who feels she or he has been or is being subjected to discrimination/harassment to report the incident to the Designated Officer. Any student, faculty member or employee who knows of, receives information about or receives a complaint of discrimination/harassment is urged to report the information or complaint to the Designated Officer.

Subpart B. Personal resolution. In instances where an individual believes she/he personally has been subjected to behavior prohibited by the 1B.1 Non-discrimination policy, that individual may voluntarily choose to directly address the offensive behavior. In such a situation, she or he should clearly explain to the alleged offender as soon as possible after the incident that the behavior is objectionable and that it stop. Communication with the alleged offender may be in person, on the telephone, or in writing. If the behavior does not stop or if the individual believes some employment or education consequences may result from the discussion, she or he should go to the Designated Officer to process the complaint. Under no circumstances shall an individual be required to use personal resolution to address prohibited behaviors rather than reporting the behavior to the Designated Officer.

Subpart C. Duty to report. Unless the matter already has been referred to the Designated Officer, administrators and supervisors must inquire into allegations or behaviors that they reasonably believe may constitute discrimination or harassment and, when a report/complaint appears to be warranted, refer the matter to the Designated Officer.

The duty to report shall not be construed to prevent immediate corrective action by an administrator or supervisor when appropriate.

Subpart D. Institutional responsibility.

1. Colleges. This procedure applies to all members of the educational community including students. Reports/complaints against the president of Lake Superior College shall be filed with the system office. Complaints against the president shall be processed by the College if the President's role in the alleged incident was limited to a decision on a recommendation made by another administrator, such as tenure, promotion or non-renewal, and the President had no other substantial involvement in the matter. Reports and complaints against the College's President, Deans, or Vice President's are filed at the campus level with the President or the President's designee as decision-maker.
2. System office. For reports/complaints which involve allegations against system office employees, the responsibilities identified in this procedure as those of the President are the responsibilities of the Chancellor. Reports/complaints which involve allegations against the Chancellor or a member of the Board of Trustees shall be referred to the Chair or Vice Chair of the Board for processing. Such reports/complaints may be assigned to appropriate system office personnel or outside investigatory assistance may be designated.

Subpart E. Retaliation and reprisal. No retaliation, reprisal or intimidation in conjunction with a complaint of discrimination/harassment shall be tolerated by the College. State law prohibits reprisal by a respondent, employer, labor organization, educational institution, employee, agent of the above and others as specified in statute. (Minnesota Statutes section 363.03). Any individual who retaliates against any person who testifies, assists, or participates in an investigation, proceeding or hearing in relation to a discrimination/harassment complaint shall be subject to disciplinary or other action.

Retaliation includes, but is not limited to, any form of intimidation, reprisal, coercion, discrimination, harassment, or unwanted sexual contact toward a complainant, or the complainant's relatives, friends or associates. Retaliation may occur whether or not there is a power or authority differential between the individuals involved. Reprisal also includes discrimination against an individual because that person is associated with a protected group member. Allegations of retaliation or reprisal shall be reported to the Designated Officer for appropriate action.

Subpart F. False statements prohibited. Any individual who provides false statements regarding the filing of a discrimination report/complaint or during the investigation of such a report/complaint may be subject to disciplinary or corrective action.

Subpart G. Withdrawn Complaints. If a complainant no longer desires to pursue a complaint, he/she reserves the right to investigate and resolve the complaint.

Part 4. Right to representation.

In accordance with federal law and applicable collective bargaining agreement and personnel plan language, represented employees may have the right to request and receive union representation during an investigatory meeting.

Nothing in this procedure is intended to expand, diminish or alter in any manner whatsoever any right or remedy available under a collective

bargaining agreement, personnel plan or law. Any disciplinary action imposed as a result of an investigation conducted under this procedure will be processed in accordance with the applicable collective bargaining agreement or personnel plan.

Part 5. Investigation and resolution.

The College has an affirmative duty to take timely and appropriate action to stop inappropriate behavior, conduct investigations and facilitate resolutions as appropriate.

Subpart A. Making a report/complaint. The Designated Officer must be contacted in order to initiate a report/complaint. The report/complaint should be brought as soon as possible after an incident occurs. The Designated Officer shall retain control of the investigatory process and determine whether and/or how to proceed.

Subpart B. Initial inquiry and review process. After receiving a report/complaint, the Designated Officer shall take the steps listed below:

1. Jurisdiction. The Designated Officer shall determine whether the report/complaint is one which should be processed through another system officer or college procedure available to the complainant; if appropriate, the Designated Officer shall direct the complainant to that procedure as soon as possible.
2. Conflicts. If the Designated Officer determines that the report/complaint falls within the scope of the institution's nondiscrimination policies and this procedure, the Designated Officer shall first determine who will conduct the complaint process. The Designated Officer should identify to the President or Chancellor any real or perceived conflict of interest in proceeding as the Designated Officer for a specific complaint. If the President determines that a conflict exists, another Designated Officer shall be assigned.
3. Information provided to complainant. At the time the report/complaint is made, the Designated Officer shall:
 - a.) inform the complainant of the provisions of the nondiscrimination policy;
 - b.) provide a copy of the policy and the report/complaint procedure to the complainant;
 - c.) advise the complainant of other options such as alternative dispute resolution or mediation and that the complainant may also choose to pursue other legal options; and
 - d.) determine whether other individuals are permitted to accompany the complainant during investigatory interviews and the extent of their involvement.
4. Complaint Form. The Designated Officer shall insure that the complaint is documented in writing on the complaint form available from College authorities. The complaint form must include:
 - a.) a detailed description of the facts upon which the charge is based;
 - b.) name(s) of the respondent(s), if known;
 - c.) a list of possible witnesses as deemed appropriate by the Designated Officer; and
 - d.) other information pertinent to the complaint. At the conclusion of the process, the final disposition of the complaint shall be included on the complaint form.
5. Information provided to the respondent. At the time initial contact is made with the respondent, the Designated Officer shall:
 - a.) inform the respondent in writing of the existence and general nature of the complaint and the provisions of the nondiscrimination policy;

- b.) provide a copy of the policy and the report/complaint procedure to the respondent;
 - c.) advise the respondent of other options such as alternative dispute resolution or mediation;
 - d.) explain to the respondent that in addition to being interviewed by the Designated Officer, the respondent may provide a written response to the allegations; and
 - e.) determine whether other individuals are permitted to accompany the respondent during investigatory interviews and the extent of their involvement.
6. Processing the complaint. The Designated Officer shall:
- a.) conduct a fact-finding inquiry or investigation into the complaint, including appropriate interviews and meetings;
 - b.) investigate the complaint without identifying the complainant, if in the judgment of the Designated Officer, this would increase the likelihood of satisfactory resolution of the complaint;
 - c.) inform the complainant, respondent, witnesses and other involved individuals of the prohibition against retaliation and reprisal;
 - d.) create, gather and maintain investigative documentation as appropriate;
 - e.) disclose appropriate information to others only on a need to know basis consistent with state and federal law, and provide a data privacy notice (Tennessee warning) in accordance with state law; and
 - f.) inform the complainant and respondent of the status of the investigation at reasonable times until final disposition of the complaint.

Subpart C. Initial inquiry and informal resolution. After conducting an initial inquiry and review, if the Designated Officer determines that the issue can be resolved without further investigation, the Designated Officer may use one or more of the following methods to resolve the complaint:

1. suggest counseling or sensitivity training;
2. conduct training for the unit, division, or department, calling attention to the consequences of engaging in such behavior;
3. facilitate meetings between the parties;
4. separate the parties, after consultation with appropriate College personnel;
5. prepare a written letter of agreement confirming that the respondent has been informed of the policy and complaint procedure, identifying and documenting the respondent's acceptance of the Designated Officer's resolution of the complaint, and stating that retaliation is prohibited;
6. other possible outcomes may include explicit agreements about future conduct, a letter of apology to the complainant, changes in workplace assignments, enrollment in a different course or program, or other appropriate action.

Subpart D. Investigation and decision process. If the above methods do not resolve the complaint within a reasonable period of time to the satisfaction of the Designated Officer, or the Designated Officer feels additional steps should be taken, the procedures in this subpart shall be followed.

1. Designated Officer. The Designated Officer shall:
- a.) conduct further investigation as deemed appropriate by the Designated Officer;
 - b.) prepare an investigation report for review by the Decision-Maker
 - c.) take additional investigative measures as requested by the Decision-Maker;

- d.) provide sufficient information to the respondent consistent with federal and state data privacy laws to allow the respondent to respond to the substance of the complaint; and
 - e.) provide the investigation report to the complainant or respondent upon request unless the information is protected under state or federal law.
2. Decision-Maker. After receiving the investigation report prepared by the Designated Officer, the Decision-Maker shall:
- a.) determine whether additional steps should be taken, at the discretion of the Decision-Maker, prior to making the decision. Additional steps may include:
 - 1. a request that the Designated Officer take additional investigative measures;
 - 2. a meeting with the complainant, respondent or other involved individuals. If a meeting involving a represented employee is convened, the complainant or respondent may choose to be accompanied by the bargaining unit representative, in accordance with the applicable collective bargaining agreement and federal and state law. Other employees may be accompanied by an attorney or other support person at the discretion of the Decision-Maker;
 - 3. a request for additional information which may include a written response from the complainant or respondent relating to the allegations of the complaint;
 - b.) take other measures deemed necessary to reach a decision;
 - c.) when making the decision, take into account the surrounding circumstances, the nature of the behaviors, the relationship(s) between the parties, the context in which the alleged incident(s) occurred, and other relevant factors;
 - d.) determine the nature, scope and timing of disciplinary or corrective action and the process for implementation if a violation of the nondiscrimination policy occurs. This may include consultation with human resource or supervisory personnel to determine appropriate discipline;
 - e.) report in writing to the complainant, respondent and the Designated Officer her or his findings as to whether or not the nondiscrimination policy has been violated. The written answer to the complainant shall be provided within 60 days after complaint is made unless reasonable cause for delay exists.

Subpart E. Confidentiality. Confidentiality cannot be guaranteed; however, care will be taken to keep investigation discussions sufficiently broad to protect the complainant's identity when appropriate. There may be instances in which the College has a responsibility to act even if the complainant requests that no action be taken. In such instances, the College may investigate and take appropriate action on the basis of the facts or evidence available.

Subpart F. Investigative data. Information gathered during the investigation will be handled in accordance with federal and state data privacy laws.

Subpart G. Other remedies.

1. Reassignment or administrative leave. Under appropriate circumstances, the President or Chancellor may reassign or place an employee on administrative leave at any point in time during the report/complaint process. In determining whether to place an employee on administrative leave or reassignment, consideration shall be given to the nature of the alleged behavior, the relationships between the parties, the context in which the alleged incidents occurred and other relevant factors. Any action taken must be consistent with the applicable collective bargaining agreement or personnel plan.

2. Summary suspension or other action. Under appropriate circumstances, the president or designee may impose on a student a summary suspension or other temporary measures at any point in time during the report/complaint process. A summary suspension may be imposed when, in the judgment of the President or designee, the accused student's presence on the College campus would constitute a threat to the safety and well-being of members of the campus community. Before implementing the summary suspension, the accused student shall be given notice of the intention to impose the summary suspension and, except in an emergency, shall be given an opportunity to present oral or written arguments against the imposition of the suspension. After the student has been summarily suspended, the report/complaint process should be completed within the shortest reasonable time period, not to exceed nine (9) class days. During the summary suspension, the student may not enter the campus or participate in any college activities without obtaining prior permission from the administrator. Other temporary measures may be taken in lieu of summary suspension where the President or designee determines such measures are appropriate.
3. Alternative dispute resolution and mediation. The College, in consultation with the System Office of Equal Opportunity and Diversity, may use alternative dispute resolution or mediation services as a method of resolving discrimination/harassment complaints. Alternative dispute resolution and mediation options require the voluntary participation of all parties to the complaint.

Part 6. System office, college, or university action.

The College shall take the appropriate corrective action based on results of the investigation and shall follow up as appropriate to ensure that the corrective action is effective. Complainants are encouraged to report any recurrences of conduct which were found to violate the college's non-discrimination policies.

The Decision-Maker shall notify the complainant and respondent in writing of the final disposition of the complaint. Written notice to parties relating to discipline, resolutions, and/or final dispositions resulting from the report/complaint process is deemed to be official correspondence from the College.

Part 7. Appeal.

Subpart A. Filing an appeal. The complainant and the respondent may appeal the decision of the Decision-Maker. An appeal must be filed in writing with the President or designee within ten (10) business days after notification of the decision. The appeal must state specific reasons why the complainant or respondent believes the decision was improper. In a complaint against a President an appeal may be considered by the Chancellor whether or not the Chancellor served as the Decision-Maker.

Subpart B. Effect of review. For employees represented by a collective bargaining agreement, an appeal under this procedure is separate and distinct from, and is not in any way related to, any contractual protections or procedures. During the pendency of the appeal, disciplinary or corrective action taken as a result of the decision shall be enforced. In addition, in cases involving sanctions of suspension for ten (10) days or longer, students shall be informed of their right to a contested case hearing under Minnesota Statutes, Chapter 14.

Subpart C. Appeal process. The President or designee shall review the record provided and determine whether the complaint is substantiated or not substantiated. The President or designee may receive additional information if the President or designee believes such information would aid in the consideration of the appeal. The decision on appeal will be made within a reasonable time and the complainant, respondent and Designated Officer shall be notified in writing of the decision. The decision on appeal exhausts the complainant's and respondent's administrative remedies under this procedure except as provided herein.

Part 8. Maintenance of report/complaint procedure documentation. During and upon the completion of the complaint process, the complaint file shall be deposited in a secure location in the office of the Designated Officer for the College. Access to the data shall be in accordance with the respective collective bargaining agreement or personnel plan, the Minnesota Government Data Practices Act, the Family Educational Rights and Privacy Act or other applicable law.

The Designated Officer is required to report investigative data concerning investigations under Board policy 1B.1 to the Office of the Chancellor on a quarterly basis.

Sexual Violence Policy: 1B.3

Part I. Policy Statement.

Sexual violence is an intolerable intrusion into the most personal and private rights of an individual, and is prohibited at Lake Superior College. Lake Superior College is committed to eliminating sexual violence in all forms and will take appropriate remedial action against any individual found responsible for acts in violation of this policy. Acts of sexual violence may also constitute violations of criminal or civil law, or other Lake Superior College policies that may require separate proceedings. To further its commitment against sexual violence, Lake Superior College provides reporting options, internal mechanisms for dispute resolution, and prevention training or other related services as appropriate.

Subpart A. Application of policy to students and others. This policy applies to all Lake Superior College students and to others, as appropriate, where alleged incidents of sexual violence have occurred on College property. Incidents of sexual violence alleged to have been committed by a student at a location other than on College property are covered by this policy pursuant to the factors listed in Minnesota State Colleges and Universities Board Policy 3.6, Part 5. Incidents of sexual violence alleged to have been committed by a Lake Superior College employee at a location other than College property are covered by this policy.

Individuals alleged to have committed acts of sexual violence on College property who are not students or employees are subject to appropriate actions by Lake Superior College, including, but not limited to, pursuing criminal or civil action against them.

Allegations of discrimination or harassment are governed by College Policy 1B.1.

Part 2. Definitions.

The following definitions apply to this policy and Procedure 1B.3.1.

Subpart A. Sexual violence. Sexual violence includes a continuum of conduct that includes sexual assault, and non-forcible sex acts, as well as aiding acts of sexual violence.

Subpart B. Sexual assault. "Sexual assault" means an actual, attempted, or threatened sexual act with another person without that person's consent. Sexual assault is often a criminal act that can be prosecuted under Minnesota law, as well as form the basis for discipline under Lake Superior College student conduct codes and employee disciplinary standards. Sexual assault includes but is not limited to:

1. Involvement without consent in any sexual act in which there is force, expressed or implied, or use of duress or deception upon the victim. Forced sexual intercourse is included in this definition, as are the acts commonly referred to as "date rape" or "acquaintance rape." This definition also includes the coercing, forcing, or attempting to coerce or force sexual intercourse or a sexual act on another.
2. Involvement in any sexual act when the victim is unable to give consent.
3. The intentional touching or coercing, forcing, or attempting to coerce or force another to touch an unwilling person's intimate parts (defined as primary genital area, groin, inner thigh, buttocks, or breast).
4. Offensive sexual behavior that is directed at another such as indecent exposure or voyeurism.

Subpart C. Consent. Consent is informed, freely given and mutually understood. If coercion, intimidation, threats, and/or physical force are used, there is no consent. If the complainant is mentally or physically incapacitated or impaired so that the complainant cannot understand the fact, nature, or extent of the sexual situation, and the condition was known or would be known to a reasonable person, there is no consent; this includes conditions due to alcohol or drug consumption, or being asleep or unconscious. Whether the respondent has taken advantage of a position of influence over the complainant may be a factor in determining consent.

Subpart D. Non-forcible sex acts. Non-forcible acts include unlawful sexual acts where consent is not relevant, such as sexual contact with an individual under the statutory age of consent, as defined by Minnesota law, or between persons who are related to each other within degrees wherein marriage is prohibited by law.

Subpart E. College property. "College property" means the facilities and land owned, leased, or under the primary control of Lake Superior College.

Subpart F. Employee. "Employee" means any individual employed by Lake Superior College, including student workers.

Subpart G. Student. "Student" means an individual who is:

1. admitted, enrolled, registered to take or is taking one or more courses, classes, or seminars, credit or noncredit, at Lake Superior College; or
2. between terms of a continuing course of study at Lake Superior College, such as summer break between spring and fall academic terms; or

3. expelled or suspended from enrollment as a student at Lake Superior College, during the pendency of any adjudication of the student disciplinary action.

Procedure - Sexual Violence Policy: 1B.3.1

Part 1. Procedure objective.

This procedure is designed to further implement Lake Superior College policy 1B.3 prohibiting sexual violence. This procedure provides a process through which individuals alleging sexual violence may pursue a complaint.

This procedure is intended to protect the rights and privacy of both the complainant and respondent and other involved individuals, as well as to prevent retaliation and reprisal.

Part 2. Definitions.

Subpart A. Policy definitions. The definitions in Policy 1B.3 also apply to this procedure.

Subpart B. Campus security authority. Campus security authority includes the following categories of individuals at the College:

1. The College's Security Department;
2. Other individuals who have campus security responsibilities in addition to the College Security Department to include maintenance staff;
3. All College administrators and supervisors, Student Life personnel, advisors, and Student Services staff;
4. An official of the College who has significant responsibility for student and campus activities, including, but not limited to, student discipline and campus judicial proceedings, and advisors to recognized student organizations. Professional counselors, whose official responsibilities include providing mental health counseling, and who are functioning within the scope of their license or certification are not included in this definition.

Part 3. Reporting incidents of sexual violence.

Subpart A. Prompt reporting encouraged. Complainants of sexual violence may report incidents at any time, but are strongly encouraged to make reports promptly in order to best preserve evidence for a potential legal or disciplinary proceeding.

Complainants are strongly encouraged to report incidents of sexual violence to law enforcement for the location where the incident occurred. Complainants are also encouraged to contact the local victim/survivor services office, counseling and health care providers, and Lake Superior College campus security authorities for appropriate action.

Subpart B. Assistance in reporting. When informed of an alleged incident of sexual violence, all Lake Superior College students and employees are urged to encourage and assist complainants, as needed, to report the incident to local law enforcement, local victim/survivor services and campus security authorities.

Lake Superior College campus security authorities, when informed of an alleged incident of sexual violence, shall promptly assist the complainant, including providing guidance in filing complaints with outside agencies including law enforcement; obtaining appropriate assistance from victim/survivor services or medical treatment

professionals; and filing a complaint with the appropriate administrator.

When appropriate, Lake Superior College may pursue legal action against a respondent, including, but not limited to, trespass or restraining orders, in addition to disciplinary action under the applicable student or employee conduct standard.

Part 4. Confidentiality of reporting.

Subpart A. Confidential reports. Because of laws concerning government data contained in Minnesota Statutes chapter 13, the Minnesota Government Data Practices Act, the College cannot guarantee confidentiality to those who report incidents of sexual violence except where those reports are privileged communications with licensed health care professionals. Some off-campus reports also may be legally privileged by law, such as reports to clergy, private legal counsel, or health care professionals.

Subpart B. Reports to campus security authorities. Complainants of sexual violence may contact any campus security authority for appropriate assistance or to report incidents. Absolute confidentiality of reports made to campus security authorities cannot be promised. However, campus security authorities shall not disclose personally identifiable information about a complainant of sexual violence without the complainant's consent except as may be required or permitted by law. There may be instances in which Lake Superior College determines it needs to act regardless of whether the parties have reached a personal resolution or if the complainant requests that no action be taken. In such instances, Lake Superior College will investigate and take appropriate action, taking care to protect the identity of the complainant and any other reporter in accordance with this procedure.

Subpart C. Required Reports. Any campus security authority or any college employee with supervisory or student-advising responsibility who has been informed of an alleged incident of sexual violence must follow College procedures for making a report. In addition, the campus security authority shall report to the Regional Investigator, the Human Resources Director and/or the Vice President of Student Services in order to initiate any applicable investigative or other resolution procedures.

Campus security authorities may be obligated to report to law enforcement the fact that a sexual assault has occurred, but the name or other personally identifiable information about the complainant will be provided only with the consent of the complainant, except as may be required or permitted by law.

Part 5. College Policy Notices.

Subpart A. Distribution of policy. Lake Superior College shall make available to each student and employee information about its Sexual Violence Policy and Procedure, post this information in appropriate campus locations, and on its policy website. Individuals may request a printed copy from the Regional Investigator, the Human Resources Office, or the Office of the Vice President of Student Services.

Subpart B. Required Notice. The College shall have a sexual violence policy, which shall include the notice provisions in this part.

1. Notice of complainant options. Following a report of sexual violence the complainant shall be promptly notified of:
 - a. Where and how to obtain immediate medical assistance; complainants should be informed that timely reporting and a medical examination within 72 hours are critical in preserving evidence of sexual assault and proving a criminal or civil case against a perpetrator. Complainants should be told, however, that they may report incidents of sexual violence at any time.
 - b. Where and how to report incidents of sexual violence to local law enforcement officials, and/or appropriate Lake Superior College system contacts for employees, students and others. Such contacts should be identified by name, location and phone number for 24-hour availability, as applicable.
 - c. Resources for where and how complainants may obtain on- or off-campus counseling, mental health or other support services.
2. Notice of complainant rights. Complainants shall be notified of the following:
 - a. Their right to file criminal charges with local law enforcement officials in sexual assault cases;
 - b. Rights under the crime victims bill of rights, Minnesota Statutes Sections 611A.01 – 611A.06, including the right to assistance from the Crime Victims Reparations Board and the Commissioner of Public Safety;
 - c. Availability of prompt assistance from campus officials, upon request, in notifying the appropriate campus investigating authorities and law enforcement officials, and, at the direction of law enforcement authorities, assistance in obtaining, securing and maintaining evidence in connection with a sexual violence incident;
 - d. Assistance available from campus authorities in preserving for a sexual violence complainant materials relating to a campus disciplinary proceeding;
 - e. That complaints of incidents of sexual violence made to campus security authorities shall be promptly and appropriately investigated and resolved;
 - f. That, at a sexual assault complainant's request, the College may take action to prevent unwanted contact with the alleged assailant, including, but not limited to, transfer of the complainant and/or the respondent to alternative classes, or a work site if such alternatives are available and feasible.

Subpart C. Complaint procedure. The College shall notify students of the process used to investigate and resolve allegations of sexual violence, as provided in part 6, subpart H.

Part 6. Investigation and disciplinary procedures.

Subpart A. Immediate action. Lake Superior College may, at any time during the report/complaint process, reassign or place on administrative leave an employee alleged to have violated this policy, in accordance with the procedures in System Procedure 1B.1.1. Such action must be consistent with the applicable collective bargaining agreement or personnel plan.

Lake Superior College may summarily suspend or take other temporary measures against a student alleged to have committed a violation of this policy, in accordance with College Procedure 1B.1.1.

Subpart B. General principles. Procedures used in response to a complaint of sexual violence should avoid requiring complainants to follow any plan of action, to prevent the possibility of re-victimization. Mediation or other negotiated dispute resolution processes between the complainant and the respondent concerning

allegations of sexual violence shall be used only if both parties voluntarily consent. No party shall be required to participate in mediation.

Lake Superior College investigation and disciplinary procedures concerning allegations of sexual violence against employees or students shall:

1. Be respectful of the needs and rights of individuals involved;
2. Proceed as promptly as possible;
3. Permit a student complainant and a student respondent to have the same opportunity to have an appropriate support person or advisor present at any interview or hearing, in a manner consistent with the governing procedures and applicable data practices law;
4. Employees shall have the right to representation consistent with the appropriate collective bargaining agreement or personnel plan;
5. Be conducted in accordance with applicable due process standards and privacy laws;
6. Inform both the complainant and respondent of the outcome in a timely manner, as permitted by applicable privacy law.

The past sexual history of the complainant and respondent shall be deemed irrelevant except as that history may directly relate to the incident being considered.

A respondent's use of any drug, including alcohol, judged to be related to an offense may be considered to be an exacerbating rather than mitigating circumstance.

Subpart C. Relationship to parallel proceedings. In general, Lake Superior College investigation and disciplinary procedures for allegations of sexual violence will proceed independent of any action taken in criminal or civil courts. Lake Superior College need not, and in most cases should not, delay its proceedings while a parallel legal action is on-going. If the College is aware of a criminal proceeding involving the alleged incident, they may contact the prosecuting authority to coordinate when feasible. Criminal or civil court proceedings are not a substitute for College procedures.

Subpart D. False statements prohibited. Lake Superior College takes allegations of sexual violence very seriously and recognizes the consequences such allegations may have on a respondent as well as the complainant. Any individual who knowingly provides false information regarding the filing of a complaint or report of sexual violence or during the investigation of such a complaint or report may be subject to discipline or under certain circumstances, legal action. Complaints of conduct that are found not to violate policy are not assumed to be false.

Subpart E. Withdrawn complaint. If a complainant no longer desires to pursue a complaint through the College's proceeding, the College reserves the right to investigate and resolve the complaint as it deems appropriate.

Subpart F. Lake Superior College discretion to pursue certain allegations. Lake Superior College reserves discretion whether to pursue alleged violations of policy under appropriate circumstances, including, but not limited to, a determination that an effective investigation is not feasible because of the passage of time, or because the respondent is no longer a student or employee of the College.

Subpart G. Lake Superior College discretion to deal with policy violations disclosed in investigation. Lake Superior College reserves the right to determine whether to pursue violations of policy by students or employees other than the respondent, including a complainant or witness, that come to light during the investigation of an incident of sexual violence. In order to encourage reporting of sexual violence, under appropriate circumstances the College administrators may choose to deal with violations of Lake Superior College policy in a manner other than disciplinary action.

Subpart H. Procedure for employees, students and individuals who are both an employee and student.

Employees and Students. If the respondent is an employee or student, the investigation and disciplinary decision-making shall be conducted pursuant to the procedures outlined in Lake Superior College Procedure 1B.1.1, Nondiscrimination in Employment Education Opportunities except that use of the optional “Personal Resolution” described in Part 3. Subpart B. should not be encouraged in dealing with allegations of sexual violence due to the seriousness of the conduct.

Nothing in this procedure is intended to expand, diminish or alter in any manner any right or remedy available under a collective bargaining agreement, personnel plan or law. Any disciplinary action imposed as a result of an investigation conducted under this procedure will be processed in accordance with the applicable collective bargaining agreement or personnel plan.

Individuals who are both an employee and a student. If the respondent is both a student and employee, the investigation shall be conducted by the Regional Investigator or the Director of Human Resources, as defined by Lake Superior College Procedure 1.B.1.1, Part 2, Subpart A. The results of the investigation shall be submitted for review to both the Decision-Maker who supervises the individual under investigation, concerning the personnel action, and to the Vice President of Student Services concerning the student action.

Subpart I. Sanctions. Sanctions that may be imposed if a finding is made that sexual violence has occurred include, but are not limited to, suspension, expulsion of students or termination from employment. The appropriate sanction will be determined on a case-by-case basis taking into account the severity of the conduct, the student’s or employee’s previous disciplinary history, and other factors as appropriate.

Subpart J. Retaliation prohibited. Actions by a student or employee intended as retaliation, reprisal or intimidation against an individual for making a complaint or participating in any way in a report or investigation under this policy are prohibited and are subject to appropriate disciplinary action.

Part 7. Sexual violence prevention and education.

Subpart A. Campus-wide training. Lake Superior College provides educational programs to students and employees to promote the awareness of sexual violence offenses, including sexual violence prevention measures and procedures for responding to incidents. Such programming is delivered on a regular basis through a variety of means including safety seminars conducted by Campus Security officials, information presented as a part of student orientation and various other activities sponsored by the College.

Subpart B. Training for individuals charged with decision-making authority. The College shall provide appropriate training and other resources to individuals charged with decision-making responsibilities under applicable procedures in order to facilitate a fair, respectful and confidential procedure on allegations of sexual violence in accordance with this and other applicable policies, procedures and laws.

Part 8. Maintenance of report/complaint procedure documentation.

Data that is collected, created, received, maintained or disseminated about incidents of sexual violence will be handled in accordance with the privacy requirements of the Minnesota Statutes chapter 13 (Minnesota Government Data Practices Act), and other applicable laws.

Information on reports of incidents of sexual violence that are made to Campus Security authorities shall be documented in accordance with the Jeanne Clery Disclosure of Campus Security and Campus Crime Statistics Act, codified at 20 United States Code section 1092 (f). Such information will be used to report campus crime statistics on campus as required by that Act.

During and upon the completion of the complaint process, the complaint file shall be maintained in the office of the Regional Investigator (when the respondent is an employee) or the Office of the Vice President of Student Services (when the respondent is a student). Access to complaint file information shall be in accordance with the applicable collective bargaining agreement or personnel plan, the Minnesota Government Data Practices Act, the Family Educational Rights and Privacy Act and other applicable law and policy.

Violence Prevention Plan Policy: 1B.1.4

Purpose

This document explains the policy and plan of Lake Superior College (LSC) to prevent workplace violence. The policy and plan have been developed in accordance with State law. It is the goal of Lake Superior College to achieve a work environment which is free from threats and acts of violence, whether perceived or real. The College will work to provide a safe workplace environment for all employees, students and visitors. Each employee, student and visitor will be treated with respect and dignity. LSC will not tolerate workplace violence of any type, from any source, including threatening or violent actions by (a) employees, whether directed against students, visitors, or other employees; or (b) students or visitors, whether directed against employees or other students or visitors.

State Law

In 1992, the Minnesota Legislature adopted the following into State statute (sections 1.50 and 15.90): The State of Minnesota adopts a policy of zero tolerance of violence. It is State policy that every person in the State has a right to live free from violence. In furtherance of that policy, Minnesota Statute 15.86 mandated each agency of State government adopt a goal of zero tolerance of violence in and around the workplace. Each such agency was also required to develop a plan describing how the agency will seek to eliminate any potential for violence (a) in and around the agency workplace, and (b) affecting the attitudes and behavior of the people whom the agency serves or regulates.

Definitions

In 1994, the Minnesota Legislature's Violence Prevention Advisory Task Force endorsed this definition of violence as a reference for those working on violence prevention issues: Violence is the abusive or unjust exercise of power, intimidation, harassment, and/or the threatened or actual use of force which results in or has a high likelihood of causing hurt, fear, injury, suffering, or death. Workplace violence generally falls into three categories: (a) a violent act or threat by a current or former employee, supervisor, or manager, or someone who has some involvement with a current or former employee, such as an employee's spouse, significant other, relative, or other person who has had a dispute with an employee; (b) a violent act or threat by someone receiving service from the agency; or (c) a violent act by someone unrelated to the work environment. Violent acts are frequently the end result of longstanding disputes or unresolved arguments which can begin with a disrespectful comment or action and escalate to more serious levels of violence. A continuum of violence often begins with such acts as name-calling or other negative comments which progress to pushing, shoving, or shouting that can continue into physical assault. The complete workplace climate or environment must be assessed in order to prevent violence, rather than merely respond to incidents or violence in the workplace. Factors external to the workplace may impact the safety of the workplace environment; e.g., the spillover effects of family violence.

Responsibility for Implementation

Supervisors and Administrators have a primary responsibility for ensuring a safe work environment. They are specifically empowered to take immediate action to resolve or stabilize violent situations in the workplace, and to protect people from harm. Supervisors will ensure appropriate incident response resources are notified immediately when a threat is made or a violent incident occurs. They will also ensure appropriate disciplinary responses to workplace violence and aggression are made.

Section 1

It is the policy of LSC and the responsibility of its employees, students, and visitors to maintain a workplace free from threats and acts of violence. LSC will work to provide a safe workplace for its employees, students, and visitors.

Each employee, student, and visitor with whom we come into contact in our work at LSC deserves to be treated with courtesy and respect. That will be accomplished by encouraging mutual respect among all individuals, establishing open and honest communication, and enforcing zero tolerance for any type of violent behavior.

LSC will work, through information, training, and enforcement, to foster a work environment and culture that is devoid of violence for employees, students, and visitors. LSC's policy includes:

- * LSC will actively work to prevent and eliminate acts of work-related violence.
- * Welcoming Environment: LSC will endeavor to create and maintain a work environment that is caring and supportive, and try to assist employees in positively resolving problems, losses, and/or other stressors that arise in their lives.
- * LSC will clarify and enforce expectations regarding behaviors for employees, students, and visitors.
- * Conduct Codes and Discipline: Standards of conduct at LSC will be clear, communicated, and consistently enforced; and discipline will be used fairly, consistently, and appropriately to deal with instances of unacceptable behavior.
- * Leadership: All employees will be expected to promote positive behavior, and to lead by example in the zero tolerance of workplace violence.
- * Language and Behavior: LSC will not tolerate rude, offensive, insulting, derogatory, hateful, threatening, or violent language or behavior among its employees, students, or visitors, including, but not limited to, such things as name-calling; heated arguments; obscene language or gestures; throwing things; harassment; pushing; stalking; insulting or slighting comments; bullying; hazing; unjust or unwarranted exercise of power; negative racial or sexual comments; assault; inappropriate touching; carrying weapons; making fun of or showing disrespect for others; offensive, derogatory, or inappropriate references to others; or any other form of language or behavior which intimidates, is offensive to, or manifests hostility toward another, whether that language or behavior occurs on campus or at LSC functions away from the campus.
- * LSC will respond promptly, positively, and aggressively to deal with threats or acts of violence. That response will include timely involvement of law enforcement agencies when appropriate.
- * Incident Response: LSC's Director of Security will be responsible for coordinating responses to violent or threatening situations in the workplace. The Director will (a) assist in the development of training programs, (b) serve as a resource referral agent and information source for supervisors and others with regard to workplace violence concerns, and (c) respond as needed to incidents involving threats or acts of workplace-related violence. This will require the Director to (a) perform situation assessments and evaluations, (b) assist with attempts to de-escalate and properly manage potentially violent situations, (c) facilitate and coordinate response actions of appropriate resources, both internal and external, and (d) coordinate appropriate follow-up action, e.g., investigation, victim assistance, preventive and corrective actions.
- * LSC hereby adopts, and will work to enforce, a policy of prohibiting possession of firearms and other dangerous weapons in the workplace.
- * Dangerous Weapon Prohibition: Effective immediately, the possession of any dangerous weapon at LSC by any person, other than official firearms carried by a law enforcement officer, is strictly prohibited. Employees, students, and visitors are prohibited from possessing any dangerous weapon while on campus or at LSC off-campus events. The category dangerous weapon includes, but is not limited to: any weapon which, per applicable law, is illegal to possess; any firearm, loaded or unloaded, assembled or disassembled, including pellet, BB and stun guns (electronic incapacitation devices); replicate firearms, as defined in Minnesota Statute 609.713; knives, and other similar instruments, bows, cross-bows, and arrows; explosives and explosive devices, including fireworks and incendiary devices, and any other item commonly used, or primarily intended for use as, a weapon; any object that has been modified to serve as, or has been employed as, a dangerous weapon; or any other item considered in the professional judgment of the Director of Security to be, or have the potential to be, a dangerous weapon.
- * Incidents of work-related threats or acts of violence will be treated seriously by LSC. Reports of all such acts will be promptly investigated, and management will take appropriate and necessary action to address each incident.
- * Incident Reporting: All incidents of threats or acts of violence are to be immediately reported to the area supervisor and the Director of Security. Reports must fully detail the specific incident and identify all persons involved, including witnesses. All reports will be fully investigated by the Director of Security, who will provide a full report to LSC's president, including a follow-up on the response action taken.

- * Critical Incidents Stress Debriefing: LSC will develop and implement procedures for dealing with critical incidents, i.e., any incident (a) involving an employee which results in death or substantial bodily harm to an employee or member of the public, (b) in which deadly force, as defined in Minnesota Statutes 609.066, Subdivision 1, is used by or against an employee, or (c) deemed serious enough by circumstances to warrant investigation and review. All critical incidents will be reported to the immediate supervisor and the Director of Security, who will follow the reporting procedures for violent acts. The critical incidents procedures will also include appropriate responses, e.g., leave, counseling, relocation or reassignment.
- * LSC will take strong disciplinary action, up to and including discharge from State employment, against employees of LSC who are involved in the commission of work-related threats or acts of violence.
- * LSC will support criminal prosecution of those who threaten or commit work-related violence against its employees, students, or visitors.
- * Pursuant to Minnesota Statute 15.86, this policy does not create any civil liability on the part of the State of Minnesota.
- * LSC will provide information and training for employees, students, and visitors to foster a work environment that is safe, respectful, proactive, and responsive to threats or acts of violence.
- * Staff Training: All employees will be provided with training in how to deal with workplace-related threats and acts of violence. That training will focus on threat awareness; identifying, preventing, and de-escalating violence; appropriate responses to threats and acts of violence; and identification of resources which are available for use once a potential problem has been identified or an incident has occurred. Assessment of additional training needs for employees will be made upon request by the area supervisor, and appropriate training programs will be developed and presented. Other training and information that foster a positive work environment, such as stress reduction, conflict management, and confronting and dealing with unacceptable behavior, will be made available.
- * Employee Counseling and Assistance: LSC will encourage use of the Employee Assistance Program (EAP), an assessment, short-term, counseling and referral agency. While supervisors, union representatives, or family members may encourage employees to seek help from EAP, the decision to use the services is voluntary. Employees may also choose to seek assistance from private health services to deal with pressures, stress, emotional problems or other personal issues which could, if ignored, lead to threats or acts of violence.
- * Safety Promotion: Information and instruction will be provided or posted for employees, students, and visitors regarding appropriate responses to potential safety threats, e.g., evacuation routes in the event of fire or other emergency. An after hours policy will be developed and disseminated to all employees, detailing essential security and safety measures. A parking lot escort service has been implemented and posted for all students and employees.
- * Valuing and Respecting Diversity: It is LSC's policy and practice to value and respect individual differences among people. Harassment of any person in the workplace is strictly prohibited. Harassment can be any behavior which is unwelcome, personally offensive, insulting, or demeaning, when (a) submission to such conduct is explicitly or implicitly made a term or condition of an individual's employment, (b) submission to, or rejection of, such conduct is used as the basis for employment decisions affecting such an individual, or (c) such conduct has the purpose or effect of unreasonably interfering with an employee's performance, or of creating an intimidating, hostile, or

offensive working environment. Harassment and discrimination are serious concerns, incidents of which may, if not corrected, result in workplace violence. The Administration will treat reports of harassment and discrimination seriously; complaints will be promptly investigated; and, if necessary, appropriate disciplinary action will be taken.

- Plan Distribution: Copies of this policy and plan have been distributed to employees, posted on employee and student bulletin boards, and included in the electronic College Policy Manual. Revisions of policies will be re-posted electronically announced by a special electronic notification to all employees. Supervisors will be responsible for informing employees of the policy and plan, and for enforcing compliance. The policy and plan is described in the Employee Handbook and is discussed at employee orientation. A copy of the policy and plan will also be available in the Human Resources office.

Access for Individuals with Disabilities Policy 1B.4

Part I. General Information

The reasonable accommodation policy implemented by Lake Superior College is based on the policies, definitions, and guidelines established by the Board of Trustees of the Minnesota State Colleges and Universities System.

Access for Students with Disabilities
Contact: Disability Services, Georgia Robillard
Room E2114
(218) 733-7650 voice
(218) 722-6893 TTY

Part 2. Definitions

Subpart A. An individual with a disability:

1. Any person who has a physical or mental impairment which substantially limits one or more of such person's major life activities, or
2. Any person who has a record of such impairment which means that a person has a history of or has been classified as having a mental or physical impairment that substantially limits one or more major life activities, or
3. Any person who is regarded as having such an impairment, which means:
 - a. Has a physical or mental impairment that may not substantially limit major life activities but that is treated by others as constituting such a limitation,
 - b. Has a physical or mental impairment that substantially limits one or more major life activities only as a result of the attitudes of others toward such impairment, or
 - c. Has no impairment but is treated by others as having such an impairment.

Subpart B. Personal devices and services:

Disability Services does not provide personal devices or services that may pose undue financial or administrative burdens. Disability Services does not provide assessment services that attempt to diagnose various disabilities or provide funding for individuals to receive off-site testing. Diagnostic assessment referrals and information are available in Disability Services.

Examples of personal devices and services include wheelchairs; individually prescribed devices, such as prescription eyeglasses or hearing aids; readers for personal use or study; personal computers; or services of a personal nature, including assistance in eating, toileting, or dressing.

Subpart C. Qualified individual:

Individuals who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication or transportation barriers, or the provision of auxiliary aids and services, meet the essential eligibility requirements for receipt of services or participation in a college program or activity. Essential eligibility requirements include, but are not limited to, academic and technical standards requisite to admission or participation in an educational program or activity.

Part 3. General Access Policy

Lake Superior College will provide access to programs, services and activities to qualified individuals with known disabilities as required by law.

Individuals who qualify for services through Disability Services must have supporting documentation from a qualified professional reviewed and on file that supports the nature of the disability that substantially limits his/her ability to function in the academic setting. Documentation of a disability must provide the following:

1. Identification of the nature and severity of the individual's disability.
2. Specific information regarding the manner in which the disability affects the individuals.
3. Description of the current course of treatment, if any, including medications and side effects, and the prognosis of the disability.
4. Suggestions and recommendations regarding possible accommodations.
5. The documentation needs to be dated, signed and current within the last three years.

Part 4. Availability and Notice

Lake Superior College shall post notices in an accessible format to the public describing:

- a. The prohibition against discrimination, and
- b. The contact for requesting reasonable accommodation or information.

Part 5. Reasonable Accommodations to Ensure Access to Programs, Services, and Activities

Lake Superior College shall make reasonable accommodations to ensure access to programs, services and activities as required by law. Access means that a qualified individual with a disability will not be excluded from participation in or be denied the benefits of the services, programs, technological access, or activities, nor will the individual be subjected to discrimination. Reasonable accommodations may include modifications to rules, policies, or practices; the removal of architectural, communication, or transportation barriers; provision of auxiliary aids; or the provision of equally-effective programs, services, or activities. In accordance with the Americans with Disabilities Act, accommodations will not be provided 1) for personal devices or services even though the individual may be a qualified individual with a disability, or 2) that result in a fundamental alteration in the nature of a service, program, or activity or in undue financial or administrative burdens.

Part 6. Offered and/or Sponsored Services or Activities for Qualified Students with Disabilities

Lake Superior College has a responsibility to provide access to services and/or activities that are operated or sponsored by the college. Such access shall be provided in a reasonable manner as required by law. The following accommodations and services are available to students with documented disabilities:

1. Support and counseling services that may include support groups, individual counseling, career counseling, and referral services,
2. Academic accommodations may include assistive devices, adaptive software, early registration course selection and program advising, alternative testing tutor referral, and a variety of classroom accommodations based on individual needs; and
3. Coordination services that may include advocating on the student's behalf and serving as the primary contact and coordinator for students needing services, assistance in working individually with faculty and administrators, intervention procedures, and grievance procedures.

Part 7. Procedure

Students who qualify for disability-related services at Lake Superior College must meet with the Disability Services Coordinator to request services. It is suggested that students meet with the Coordinator at least two weeks prior to the beginning of each term. The development of academic accommodations often requires ample preparation time, and late requests may not be honored in a timely manner.

Students who request disability services must:

1. Complete a Disability Services request form.
2. Provide the Coordinator with current documentation (no more than 3 years old) of the disability and/or a signed "Release of Information" form whereby the Coordinator can obtain the documentation materials.
3. Allow the documentation of a disability to be reviewed and maintained in a confidential file or be willing to undergo diagnostic testing to determine the eligibility of services.
4. Schedule an appointment with the Coordinator to review the information and develop an accommodation plan.
5. Meet with the Coordinator each term to update the accommodation plan, and notify the Coordinator if the nature of the disability changes that may require revisions to the accommodation plan.

For information regarding reasonable access and accommodations, contact:

Georgia Robillard
Disability Services Coordinator
Lake Superior College
2101 Trinity Road
Duluth, MN 55811
(218) 733-7650 or TTY/(218) 722-6893

Students who are denied a request for program access may appeal by filing a written statement to the Vice President of Student Services.

The information contained in this notice can be made available in alternative formats, by contacting Disability Services.

Confidentiality of Student Records Policy 2.0

General Information/Policy

Lake Superior College is in full compliance with the provisions of the Minnesota Data Practices Act and Federal Educational Rights and Privacy Act of 1974. Students have access to any and all educational information kept on them in the files of the Student Services Center at Lake Superior College. This also applies to other schools where the student is enrolled, as well as the parents of students who are less than 18 years of age.

Classification of Data on Students (Educational Data)

The term "student" includes a person currently or formerly enrolled and applicants for admission.

Data on students means, in general, all data in which any individual is or can be identified. By statute, data on students is termed "educational data."

Records of instructional personnel which are in the sole possession of the maker and are not accessible or revealed to any other individual except a substitute teacher and are destroyed at the end of the school year shall not be subject to the restrictions of this policy.

Records made or maintained by a physician, psychiatrist, psychologist, or other recognized professional, and if the records are used only for treatment of a student and made available only to those persons providing treatment, shall not be subject to the restrictions of this policy.

Records relating to a student as an employee shall be subject to personnel policies rather than student data privacy policies, unless this employment is contingent upon attendance.

Public Student Data

This data is accessible to any member of the public for any reason. It includes the following items:

1. Statistical studies on students where individuals cannot be identified, including follow-up, profiles, enrollments, and financial aid.
2. Student performance records for which the performance is public.
3. Directory information.

The following information has been designated as "directory information." It is considered public data unless requested in writing that this data be treated as private.

1. Name
2. Graduation date
3. Major
4. Status - full time/part time
5. Degrees, honors, and awards
6. Dates of attendance
7. Activity participation
8. Most recent previous school attended
9. Address
10. Telephone number

Private Student Data

This data is not accessible to the public. It is accessible to the subject of the data, to individuals or agencies authorized by law to gain access, and to any person or agency having the approval of the subject. For students under the age of 18, however, private data may be released to

parents and/or other schools where the student is enrolled. Unless there is a specific law stating otherwise, or as stated elsewhere in this rule, educational data is presumed to be private. Private data includes:

1. Academic information, including transcripts, grades, and test results.
2. Recommendation information. (It is not required that recommendations placed in the record prior to January 1, 1975, be shown to a student.)
3. Evaluations.
4. Profile information which identifies individuals.
5. Student financial aid records and other financial information.
6. Background information, including behavior, performance, and traits.
7. Counselor records, except if they contain information otherwise classified as confidential or as public.

Confidential Data

This data is not accessible to the public or to the subject of the data. It is accessible only to individuals or agencies authorized by law to gain access. Confidential data includes:

1. Investigation information collected for purposes of active or pending legal action, prior to such action.
2. Investigation information collected for purposes of anticipated suspension or expulsion of students for disciplinary reasons, prior to the formal action.
3. Legal counsel.
4. Financial records and statements of a student's parents.

Access to Private Data on Students

Private student data shall be disclosed only:

1. To the student who is the subject of the data.
2. To officials or to other schools upon written request of the student.
3. To any person or agency if the student has given informed consent. Informed consent requires the signing of a statement that:
 - a. Is in plain language.
 - b. Is dated.
 - c. Indicates who shall release and who shall receive the information.
 - d. Specifies the nature of the data.
 - e. Specifies the purposes of which information may be used.
 - f. Indicates the expiration date, usually not to exceed one year.
4. To other college personnel and system office personnel who have legitimate educational interests. Authorized personnel include:
 - a. Persons employed by the College in an administrative, supervisory, advisory, research, or support staff position.
 - b. Persons employed by or under contract to the College to perform a special task, such as the attorney or auditor.
 - c. Students serving on an official committee, such as a disciplinary or grievance committee, or who are assisting another school official in performing his/her tasks.
5. In connection with a student's application form, or receipt of, financial aid.
6. To parents of an eligible student under age 18 who is claimed as a dependent for tax purposes.
7. To other schools that a student under the age of 18 is attending.
8. To federal or state authorities in connection with the audit and evaluation of federally-supported educational programs.
9. To state and local officials, as may be required by state statute existing prior to November 19, 1974.
10. To accrediting organizations in order to carry out their accrediting functions.
11. To the alleged victim of a crime of violence when the College has the results of any disciplinary proceedings conducted by the College against an alleged perpetrator of that crime.

12. To organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of:
 - a. Developing, validating, or administering predictive tests.
 - b. Administering student aid programs.
 - c. Improving instruction.
 (These studies are conducted in such a manner as will not permit the personal identification of students by persons other than representatives of such organizations, with the information to be destroyed when no longer needed for its purpose.)
13. To appropriate persons, if the knowledge of such information is necessary to protect the health or safety of the student or other persons.
14. On the basis of a valid court order, or a lawfully issued subpoena - but only after calling the court's attention, through proper channels, to the statutory provisions, rules, or regulations which restrict the disclosure of such information. The College may disclose records to a court without a court order or subpoena when the institution initiates legal action against a student and gives the student prior notice of the intended disclosure.
15. To appropriate health authorities, but only to the extent necessary to administer immunization programs.
16. For other purposes stated to the student at the time of collection.

Student Rights Regarding Personal Information

Students asked to supply private or confidential data concerning themselves shall be informed of:

1. The purpose and intended use of the data.
2. Whether one may refuse or is legally required to supply the requested data.
3. Any known consequences arising from supplying or refusing to supply private or confidential data.
4. The identity of other persons or entities authorized by state or federal law to receive the data.
5. Whether the college maintains any data on him or her and what the classification of that data is. This includes confidential data.
6. The right to review all private or public data (on self) without any charge.
7. The right to receive copies of private or public data (on self). The agency may charge a fee, which covers the actual costs involved, for providing copies.
8. The right to be informed as to what is classified as directory information, and on request have any or all of it treated as private data.
9. The right to contest, in writing, the accuracy or completeness of public or private data. The college shall within 30 days either correct the data found to be in error, or notify the student that the college believes the data to be correct. If data is found to be incorrect, the college shall attempt to notify past recipients. The student may appeal an adverse determination of the college through the provisions of the Administrative Procedures Act relating to contested cases.
10. The right to file a complaint with the College or the U.S. Department of Education for any alleged noncompliance with this policy.

Records of Requests and Disclosures

The college shall list with the educational records of each student the parties who have requested or obtained access to a student's educational records, and the legitimate interest these parties had in obtaining this information.

Campus Student Associations Policy 2.1

Part 1.

Establishment In accordance with MnSCU Policy 2.1 Campus Student Associations, Lake Superior College recognizes the LSC Student Senate as the official body for student representation on campus.

Part 2. Duties

The purpose of the Student Senate is to work to improve the quality of education and to assist in the development of student life activity.

1. The Student Senate shall develop a constitution which defines a fair selection process for student representatives and the ratification process for the student government.
2. The Student Senate has the exclusive right to recommend to the College President the chartering of student clubs and organizations on campus.
3. The Student Senate shall attempt to fill committee openings with members representative of all the college clubs and organizations.
4. The Student Senate shall consider not only campus issues, but state and national issues and/or legislative actions.

Part 3.

Appeal Decisions made by the LSC Student Senate may be appealed by submitting in writing the decision made by the LSC Student Senate and the reason for the appeal to the Vice President of Student Services.

State Residency Requirements Policy 2.2

Part 1. Definition of Domicile.

A person's true, fixed and permanent living place. Domicile is the place to which a person intends to return after temporary absences. A person may have only one domicile at a time.

Part 2. Determination of In-State Tuition.

Subpart A. Statute. Students shall be eligible to pay in-state tuition if they meet the criteria of M.S. 135A.031, subd. 2.

Subpart B. Demonstrating domicile. Students may establish eligibility for in-state tuition by demonstrating domicile in Minnesota before the beginning of any semester. Students have the burden of proving domicile for the purpose of in-state tuition. All documentation should be submitted to the Director of Admissions.

1. Students who seek to qualify for in-state tuition must first 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.
 - b. Residence in Minnesota must not be merely for the purpose of attending 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 of financial support are generated within Minnesota.
 - c. Domicile in Minnesota of family, guardian, or other relatives or persons legally responsible for the student.

- d. Ownership of a home in Minnesota.
- 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 fact 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 a student's spouse in Minnesota.
 - e. Automobile registration.
 - f. Other public records, e.g., birth and marriage records

Subpart C. Exceptions. Individuals in the following categories shall qualify for instate tuition rates;

1. Nonimmigrant Japanese students who have completed a program of study of at least one academic year at Akita campus and have been recommended by the provost for transfer to Lake Superior College and who retain their legal visa status.
2. Students who are recognized as refugees by the Office of Refugee Resettlement of the U.S. Department of Health and Human Services.
3. U.S. military personnel serving on active duty assignment in Minnesota, and their spouses and dependent children.
4. Nonimmigrant international students classified under 8, U.S.C. 1101 (A) (15) (B), (D), (F), (H), (J), and (M).

Student Involvement In Decision Making Policy 2.3

Part 1. General

Lake Superior College values student participation and involvement. Student representatives are a part of decision making and serve on college committees where appropriate. Some issues require ongoing student participation, and other issues require student review or consultation. The college president shall:

1. Meet with the campus student association at least twice per semester to discuss issues of mutual concern,
2. Inform the campus student association of the subject of scheduled reviews or consultations at least a week in advance except under very unusual circumstances as reported to the Chancellor,
3. Structure the consultation process to provide adequate time for students to be able to discuss and consider an issue prior to any proposed recommendation.

Part 2. Student Participation

Student representatives shall be selected by the LSC Student Senate and shall have the opportunity to participate in policy development and/or the decision-making process. Student representation shall be equal to that of any other constituent group.

Part 3. Exceptions

Exceptions for this policy include the following:

1. The Student Life Committee, which shall consist of a minimum of two-thirds student representation.
2. More than equal constituent representation can serve on any one committee with authorization from the college president or designee.
3. Committees established for the evaluation of personnel.
4. Committees established under collective bargaining agreements.
5. Management teams and executive committees of Lake Superior College.

Part 4. Review and Consultation

To provide a mechanism for student review and consultation, the Lake Superior College administration meets regularly with student representatives appointed by the campus student association. The purpose of these meetings is to provide information and to exchange views and concerns among administrators and students.

Subpart A. Review

A review is an information report by the administration and includes an opportunity for students to ask questions on the information presented. The review process is used to inform the student association of an issue of potential concern to the students. Prior to the meeting, the student association is notified of the agenda items.

Subpart B. Consultation

Consultation means that the administration seeks an opinion from the campus student association and considers that information in the decision-making process. Consultation includes presentation of materials, discussion, and an opportunity for students to ask questions. The consultation process is used to gather student input and/or recommendations and can provide a forum for developing agreements between the administration and the student association. Prior to the meeting, the student association is notified of the agenda items. Necessary background materials are provided in advance of the meeting except under very unusual circumstances as reported to the Chancellor. If resolution or agreement is proposed, the student association shall have a reasonable amount of time to discuss and consider the issue internally.

When a Lake Superior College proposal requiring consultation is to be considered by the Board of Trustees, the college president shall submit an authorized letter to the Office of the Chancellor from the campus student association prior to the first reading, stating the level of consultation and any position taken by the association on the issue, except under very unusual circumstances as reported to the Chancellor.

Posting Policy 2.5

Bulletin boards are available throughout the campus to allow for the posting of announcements, activities and information. All postings must be approved through the Student Life Center. Upon approval, the posting shall be date stamped and placed in the appropriate designated posting area(s). This does not include departments posting on their department bulletin boards or in designated posting areas. Postings may not in any way discriminate, harass, or infringe on anyone's rights in accordance with MnSCU or Lake Superior College policies. Any legal liability or damage resulting from the posting will be the sole responsibility of the person, organization, or group sponsoring the posted material.

This policy shall in no way infringe upon the students' freedoms as expressed in the LSC Student Handbook, Student Rights and Responsibilities, or their freedom of speech.

Student Life Policy 2.8

General. Lake Superior College Student Life Committee shall adhere to MnSCU Policy 2.8 and MnSCU Procedures 2.8.1 in conducting the duties designated.

Part 1. Student Life Program. The Student Life Program shall be funded by the student life/activity fee authorized by MnSCU Policy 5.11 and Procedure 5.11.1. Student Life activities shall be consistent with M.S. 136F01, subdivision 5. All funding decisions shall be made in a viewpoint neutral manner.

Part 2. Student Life Committee.

Subpart A. Establishment and membership. The Student Senate shall appoint the student members of the Student Life Committee. Not more than one-third of the voting committee members shall be non-students. After consulting with the President or designee, the Student Senate may review and amend the membership structure of the Student Life Committee for the next academic year.

Membership

- Administrator – 1
- MSCF – 2
- MAPE/MMA – 1 (bargaining units will alternate annually)
- AFSCME – 1
- Students – 10
- Student Senate - 5
- Campus Ambassador – 1
- Student Organizations – 3 (may be filled with at-large students when no club members are interested)
- Student at Large – 1 (cannot be affiliated with any student organization)

Students shall meet the following criteria:

- Be appointed by the Student Senate
- Maintain a cumulative GPA of 2.0 and a cumulative completion rate of at least 67%
- Be enrolled for a minimum of 3 credits
- Pay the student life fee
- Cannot serve more than two years on the committee

Student Senate will strive to ensure a diverse student representation to include minority and international students through the appointment process.

Faculty/Staff criteria:

Be recommended by the appropriate bargaining unit.

Limit of two years, unless position cannot be filled, and bargaining unit continues with recommendation.

Administrator criteria:

Be appointed by the College's President

Subpart B. Committee responsibility.

- The Student Life Committee shall establish rules governing the process for the allocation of funds.
- The Student Life Committee shall develop and monitor all budgets and expenditures funded by the student life/activity fee within the guidelines of LSC and MnSCU policies 5.2, 5.2.1, and 2.8.1.
- The Student Life Committee shall annually recommend the amount of the fee to the LSC Student Senate no later than November 30th of each year for the ensuing year for review and recommendation to the college's President for approval.
- Compensation for student leaders shall be funded following the guidelines of LSC policy 2.8.2, Student Stipends.

Subpart C. Campus student government. The Student Life Committee shall fund the Student Senate.

Subpart D. Authority for expenditures. The College's President shall approve, reject or modify the Student Life fee and/or budget and authorize the collection and expenditure of such fees. The Student Senate shall be consulted on any modification to the Senate's budget and expenditure recommendation prior to implementation. Student Life fund balances shall have carry-over authority into the next fiscal year. The President of Lake Superior College shall authorize the expenditures of the Student Life budget. The Director of Student Life shall distribute the allocated funds per the approved expenditures of the President.

Subpart E. Budget reserves. Budget reserves may be established and their status shall be annually reported to the Student Life Committee.

Student Life - Procedure Policy 2.8.1

Part 1. Definitions

Student organization: Those clubs and organizations that have been formally recognized by the LSC Student Senate and approved by the College's President.

Student life/activities: Student life/activities are those activities consistent with M.S. 136F01. Subd. 5.

Part 2. Management of Student Life fee allocations.

Subpart A. Budget process.

- The Director of Student Life shall submit a proposed budget to the Student Life Committee no later than February of each year for the following year.
- The Committee shall review the proposed budget and vote on the final recommendation that will be forwarded to the Student Senate and the College President.
- The Committee shall present the Student Life budget to the LSC Student Senate for review and recommendation to the College President for approval no later than April 30th of each year.
- The Student Life Committee shall develop a fiscal sub-committee to review Student Life expenditures and all requests for funds. The sub-committee shall report monthly to the Student Life Committee.

Subpart B. Student organization accounts. Lake Superior College shall provide for the fiscal management of student organization accounts. A student organization which receives allocations of student activity monies shall deposit and expend all allocations through their designated cost center. Student organizations may establish a separate cost center for funds received from outside sources (e.g. fund-raising efforts) for specific purposes.

Subpart C. Annual report. The Director of Student Life shall prepare and submit an annual report. The annual report shall be provided to the Student Senate and the Vice President of Student Services. The report shall also be made available to interested parties. The Student Senate may request that the institution provide a detailed accounting or obtain an audit of its Student Life fund which shall be made available to interested parties. The cost of these audits shall be borne by Lake Superior College's Student Life fund.

Subpart D. Carry forward and reserves. Expenditures from carry forward, including reserves, shall occur only after receipt of a recommendation from the Student Life Committee. The amount of these carry forward funds shall be reported to the Student Life Committee. The Committee may review and make recommendations regarding the investment policy for student life reserves.

Subpart E. Use of Funds.

1. The Student Life fee shall only fund activities that are consistent with M.S. 136F.01, Subd. 5.
2. The Student Life Committee shall follow commonly accepted business practices in the operation and funding of Student Life programs.
3. This policy and procedure seeks to ensure the proper use and stewardship of public funds in the operation of the Student Life programs.
4. The Vice President of Student Services and the Student Senate shall jointly establish guidelines on appropriate business practices for expenditures from the Student Life fund.
5. Student Life funds shall not be used for the purchase of alcohol.
6. Student Life fees shall not be used as donations to college or university foundations or to other external charitable organizations.
7. Student Life fees shall not be used to provide individual scholarships or grants.
8. The Student Life Committee may agree to provide funds for its own support through the Student Life budget process.

Student Stipends Policy 2.8.2

Part 1. General

Stipends shall be awarded to students who demonstrate leadership and/or outstanding contributions to Lake Superior College. All stipends shall be awarded as credits. Stipends shall be financed by the Student Life activity fee, and allocated by the Student Life Committee. The Student Senate shall establish a special committee for the distribution of stipend credits.

Part 2. Stipends

Lake Superior College shall award 31.5 stipend credits each semester, for a total of 63 stipend credits for the academic year. These stipend credits shall be awarded to students on a semester basis. The LSC Student Senate shall distribute these stipends at the end of each semester following the procedures established in this policy. The Student Life Committee may award additional stipend credits in excess of the 63 stipends authorized by this policy.

1. The Student Senate will be allocated 33 stipends.
2. The Student Body will be allocated 30 stipends.

Part 3. Criteria

Stipend credits shall be distributed following the criteria below:

1. Stipend recipients must obtain a C grade or better for each stipend credit received.
2. Stipends shall be awarded at the end of each semester.
3. Unused stipend credits shall be carried forward to the next semester.
4. Stipend credits may not be carried over from year to year.
5. The Student Senate President shall receive a minimum of six and no more than 10 stipend credits to be determined by the stipend committee each semester.
6. None of the six stipend credits intended for the Student Senate President may be awarded to any other individual.

Part 4. Procedure

1. The Student Senate shall establish a committee to distribute stipend credits. The committee shall consist of four Student Senate members, two student body members, two faculty members (one LSCFA and one UTCE), and one staff member.
2. The committee shall meet at the end of each semester after the grades have been posted.
3. The committee shall receive nominations from LSC students, faculty, and staff for the purpose of distributing stipend credits.
4. Upon receiving the nominations, the committee shall review all nominations.
5. The committee shall determine stipend credits awards by ballot.
6. The committee shall submit all awards to the Student Life Director for processing.

Students' Satisfactory Academic Progress Policy 2.9

Lake Superior College requires that students make satisfactory academic progress toward a degree, diploma or certificate to remain in good standing. Additionally, federal law requires that a recipient of state or federal financial aid make satisfactory academic progress toward a program (AA, AAS, AS degree, diploma or certificate) to remain eligible for aid.

Measurement of student satisfactory academic progress toward achievement of an academic award is an important activity in higher education. Such measurement provides feedback to students and ensures responsible action by colleges and universities regarding effective use of state resources.

Student academic progress must also be monitored to ensure effective and responsible management of federal and state student financial aid. Students within the Minnesota State Colleges and Universities are often enrolled in more than one institution. Students also transfer frequently among colleges and universities. Therefore, institutional financial aid satisfactory academic progress policies shall be as uniform as possible, consistent with individual institutional missions.

The Office of the Registrar shall be responsible for the implementation and monitoring of this policy and procedure.

Students' Satisfactory Academic Progress Procedure Policy 2.9.1

Part 1. Qualitative Measure of Progress

Grade Point Average. All program students are required to maintain the minimum GPA of 2.0. Monitoring begins with the first attempted credit. Grades of A, B, C, D and F will be included in the GPA calculation.

Part 2. Quantitative Measure of Progress

Subpart A. Completion Rate. All program students are required to earn a minimum of 67% of cumulative registered credits. Monitoring begins with the first attempted credit.

At the end of each term, the College shall compare the number of credits the student successfully completed to the number of credits the student attempted to determine whether the student is progressing at a rate that will allow completion of the program within the maximum

time frame. Courses for which a student receives a letter grade of A, B, C, D, and P are included in the calculation of cumulative credit completion percentage as courses successfully completed.

Courses for which a student receives a letter grade of I, IP, NC, W, and F will be treated as credits attempted but not successfully completed. Blank ("Z") grades will be treated as credits attempted but not successfully completed. Audited courses (V) are not counted.

Subpart B. Maximum Time Frame for Program Completion. All students are expected to complete their program within an acceptable period of time. The maximum time frame for financial aid recipients is 150% of the published credit length of their program.

Students who have only one active program at LSC may not receive financial aid if the total number of attempted credits in combination with accepted transfer credits is equal to or more than 150% of the credit length of their active program. Withdrawals are considered attempted credits.

Students who graduate from an LSC program and enroll in a new program may not receive financial aid if the total number of attempted credits in combination with accepted transfer credits is equal to or more than 150% of the credit length of their new program.

Required credits listed on the program planner for their completed program that do not transfer into their new program will not be considered as part of the 150% total attempted credits for the new program.

Students with more than one active program may not receive financial aid if the total number of attempted credits in combination with accepted transfer credits is equal to or more than 150% of the credit length their first ranked program.

Once students have graduated from their first ranked program, required credits listed on the program planner that do not transfer into their second program will not be considered as part of the 150% total attempted credits for the second program.

All non-repeated developmental courses that the student successfully completes with a C or better will not be counted toward the 150% completion rate.

Part 3. Evaluation Period

All program students with registered credits during a term will be evaluated at the end of the term. Programs less than one year in length must be evaluated at the midpoint of the program.

Part 4. Failure to Meet Standards

Subpart A. Maximum Time-Frame Failure. If at the end of the evaluation period a student has failed to meet a college's standard for measurement of maximum time-frame, the college will suspend that student from financial aid eligibility immediately upon completion of the evaluation.

Subpart B. Qualitative Standard or Completion Percentage Failure

Any program student who fails to meet the minimum satisfactory academic requirements for one term will be placed on probation for one term, commencing immediately.

Subpart C. Reinstatement of Students on Probationary Status. If at the end of the probationary period a student who has been on probationary status has met the college's cumulative qualitative and quantitative stands, the college will reinstate the student's eligibility to attend.

Subpart D. Suspension of Students on Probationary Status.

Students who fail to meet the terms of probation will be suspended, commencing immediately. For first-time suspension, the student must file a "Suspension Appeal" to request to return.

For a second or subsequent suspension, the student may not appeal for reinstatement for two full terms (excluding summer) and may not re-enroll without an approved appeal. Please refer to the chart below:

Suspended at end of:	Earliest Term to Appeal:	Earliest Term to Return:
Fall Term	Fall term of the following year	The term following the term of appeal.
Spring Term	Spring term of the following year	The term following the term of appeal.
Summer Term	Spring term of the following year	The term following the term of appeal.

Students returning from suspension will enter on a probationary status as stated in Subpart E below.

Subpart E. Continuation of Students on Probationary Status.

Students who are placed on probation due to their GPA must have a 2.5 minimum term GPA OR cumulative GPA of at least 2.0 while still maintaining a cumulative completion ratio of 67%. Students who are placed on probation due to their completion rate must complete 100% of the term credits OR reach a cumulative completion rate of 67% while maintaining a minimum cumulative GPA of 2.0. Students who are on probation due to both GPA and completion ratio must meet both standards defined above. Students who meet the standards as defined will remain on probation, until such time as: (a) the student has met the college's cumulative qualitative and quantitative standards, or (b) the student fails to meet the college's qualitative or quantitative standards for the courses in which he or she was enrolled during the probationary period, at which time the college will suspend the student immediately upon completion of the review, or (c) the college determines that it is not possible for a student to raise her or his GPA or course completion percentage to meet the college's standards before the student would reach the end of the program in which he or she is enrolled at which time the college will suspend the student immediately upon completion of the evaluation.

Subpart F. Suspension of Students for Extraordinary Circumstances.

The College may immediately suspend students from financial aid eligibility in the event of extraordinary circumstances, including but not limited to previously suspended (and reinstated) students whose academic performance falls below acceptable standards during a subsequent term of enrollment; students who register for courses, receive financial aid, and do not attend any classes; and students whose attendance patterns appear to abuse the receipt of financial aid.

Part 5. Notification

The College will notify the student via his/her student email account any time the student is placed in a probationary status or suspended from the institution.

Part 6. Appeals

A student who fails to make satisfactory academic progress and is suspended from enrollment and/or financial aid has the right to appeal. Appeals for earliest possible reinstatement must be based on unusual or extenuating circumstances, including but not limited to death of a relative, illness, hospitalization, or injury of the student.

1. All students must submit a written appeal in consultation with a counselor.
2. Appeals based on unusual or extenuating circumstances must include an explanation of the circumstances beyond the student's control that affected academic progress and a detailed plan for success. Such appeals must include official/professional documentation (e.g., medical records, court documents) which supports the written explanation.
3. All appeals will be considered by the Suspension Appeals Board, which consists of: an Academic Dean, the Director of Counseling and Advising Services, the Registrar, and a representative from Financial Aid.
4. Deadlines for appeals submission will be clearly stated in the students' suspension letters. Students will be notified via their student email account of the Board's decision.
5. Suspended students not currently enrolled, including transfer students, must complete the appeals process by the following deadlines: June 15 for Fall Term, November 15 for Spring Term, April 15 for Summer Term. A written decision on the appeal will be provided to the student.
6. Students who wish to appeal the decision of the Suspension Appeals Board may submit their request to the Vice President of Student Services within 10 calendar days of the Board's decision or prior to the first day of the term whichever comes first. The decision of the Vice President of Student Services is final and binding.
7. Students whose appeals are approved must contact an advisor to register for classes.

Part 7. Reinstatement

Students who have been suspended may regain their eligibility only through the College's appeal process or when they are again meeting the College's academic progress qualitative and quantitative standards.

Part 8. Additional elements.

Subpart A. Treatment of grades. Courses for which a student receives a letter grade of A, B, C, D, and P are included in the calculation of cumulative credit completion percentage as courses successfully completed.

Courses for which a student receives a letter grade of I, IP (in progress), NC, W, and F will be treated as credits attempted but not successfully completed. Blank ("Z") grades will be treated as credits attempted but not successfully completed. Audited courses (V) are not counted.

Subpart B. Fresh Start. Credits for which students have been granted academic amnesty (Fresh Start III.4.8) will be recorded and retained in the Student Data System in such a way that they will be included in both the qualitative and quantitative measurement of satisfactory academic progress.

Subpart C. Audited Courses. Audited courses will not be funded by financial aid and are not included in any satisfactory academic progress measurements.

Subpart D. Consortium Credits. Credits for which financial aid is received under a consortium agreement will be recorded in the Student Data System to be included in cumulative GPA, completion percentage, and maximum time-frame calculations.

Subpart E. Remedial/Developmental and ESL Credits. Remedial/developmental and ESL credits are included in the qualitative and completion percentage measurement of satisfactory academic progress. Remedial/developmental and ESL non-repeated credits with a "C" or better will be excluded from maximum time-frame calculation for program completion.

Subpart F. Repeated Courses. Students may repeat courses in which they have received a D, F, or NC grade. Students who wish to repeat courses in which they received a B or C may petition to do so. The more recent grade will be used to calculate cumulative GPA. Repeat credits will be calculated into completion percentage for satisfactory academic progress and are not financial aid eligible.

Subpart G. Transfer Credits. Transfer credits accepted by Lake Superior College are not counted as credits attempted for calculation of cumulative completion percentage, and grades associated with these credits will not be used in calculating cumulative GPA.

Transfer credits accepted by the college and applied toward a student's general education, program, or degree requirements will apply toward the maximum timeframe calculation.

If, at the point of admission, a transfer student's prior academic record does not meet the admitting Lake Superior College's minimum cumulative qualitative or quantitative SAP standards, the college shall immediately place that student in a probationary status for financial aid eligibility.

Subpart H. Withdrawals. Credits for which a grade of "W" is received are considered attempted credits but not successfully completed credits for the purpose of monitoring satisfactory academic progress. Thus, a "W" does not impact GPA but does negatively impact the cumulative completion percentage.

Course Repeat General Information/Policy 2.9.2

Students may repeat courses in which they have received a D, F, FN, or NC grade. Students who wish to repeat courses in which they received a B or C must petition to do so. The more recent grade will be used to calculate cumulative GPA: Repeat credits of this nature are not financial aid eligible.

Credit is granted only once for repeated courses unless a course description specifically indicates otherwise. Limits for the number of credits that will be granted in these cases will be defined in the course description.

Student Rights and Responsibilities Policy 3.1

Part 1. Freedom to Learn

In addition to the basic constitutional rights enjoyed by all citizens, Lake Superior College students have specific rights related to academic freedom and their status as students. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students are expected to exercise their freedom with responsibility.

Part 2. Freedom of Expression

Individual students and student organizations shall be free to examine and to discuss all questions of interest to them and to express opinions publicly and privately. They shall be free to support causes by orderly means that do not disrupt the regular and essential operation of the institution. In the classroom, students shall be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.

Part 3. Freedom of Association

Students shall be free to organize and join organizations to promote their common and lawful interests, subject to institutional policies or regulations. Registration or recognition may be withheld or withdrawn from organizations that violate institutional regulations.

Part 4. Student-Sponsored Forums

Students shall have the right to assemble, to select speakers, and to discuss issues of their choice. The College shall establish reasonable time, place and manner restrictions to assure that the assembly does not substantially disrupt the work of the institution or does not interfere with the opportunity of other students to obtain an education or otherwise infringe upon the rights of others. Such regulations shall not be used as a means of censorship. The President or designee may prohibit any forum when holding the event, in his or her judgment, would result in physical harm or threat of physical harm to persons or property. Prior to any such prohibition, the President shall make his or her best effort to consult with a designated member of the student association.

Part 5. Student Publications

Student-funded publications shall be free of censorship and advance approval of copy, and their editors and managers shall be free to develop their own editorial and news coverage policies. Editors and managers of student publications shall be protected from arbitrary suspension and removal because of student, faculty, administrative, or public disapproval of editorial policy or content. The student fee allocation process shall not be used as a means of editorial control of student-funded publications. All student publications shall explicitly state on the editorial page that the opinions there expressed are not necessarily those of the College, system, or student body.

Part 6. Catalog and Course Information

To the extent possible, students will be provided relevant and accurate information regarding courses prior to enrollment. Catalog descriptions will be accurate and based on information existing at the time of publication. To the extent possible, class schedules will list the names of faculty teaching courses.

Part 7. Academic Information

Students shall have access to accurate information about general requirements for establishing and maintaining acceptable academic standing, information which will enable students to determine their individual academic standing, and information regarding graduation requirements.

Part 8. Academic Evaluation

Student academic performance shall be evaluated solely on the basis of academic standards, including any requirements that are noted in the catalog, course syllabus, or Student Handbook. Students shall have protection against prejudiced or capricious evaluation and shall not be evaluated on the basis of opinions or conduct in matters unrelated to academic standards. Students shall have the right to review their corrected examinations or other required assignments used by the faculty in evaluating the student's academic performance.

Part 9. Property Rights

Term papers, essays, projects, works of art, and similar property shall be returned to a student upon request, within a reasonable timeframe, when no longer needed for evaluation purposes, unless the student grants written permission for them to be retained.

Part 10. Off-Campus Conduct

Students who violate a local ordinance or state law risk the legal penalties prescribed by civil authorities. The College need not concern itself with every violation. Nevertheless, the College may take disciplinary action against students for off-campus behavior, following the procedures of the Lake Superior College Code of Conduct.

Assessment for College Course Placement Policy 3.3

Part I. General Information/Policy

Students are required to complete the College Placement Test (CPT) prior to enrolling in any college-level writing, mathematics or reading-intensive courses.

Test scores enable students to be properly placed in courses appropriate to their skills. Students who score below the minimum standards are required to successfully complete appropriate developmental education courses with a grade of 'C' or better.

The following exemptions shall be made:

1. Students who earned developmental education credits or were assessed two or more years prior to the time of admission are advised to reassess to ensure currency of their skills.
2. Students transferring credits in college algebra (equivalent to MATH1100 or MATH1105) do not need to take the math component of the test.
3. Students transferring in credits in college composition (equivalent to ENGL 1106) do not need to take the English or reading component of the test.
4. Students who have scored 24 on the ACT portions of mathematics, English and reading do not need to be assessed.
5. Students who are non-degree seeking are not required to be assessed.

CPT Reassessment Policy 3.3.1

Part 1. General Information

A student may be allowed to take one CPT (Computerized Placement Test) reassessment per academic year. (Academic year consists of Fall, Spring, and Summer terms)

A CPT reassessment may include from one to three disciplines. (Disciplines are defined as writing, reading, and math)

The score(s) of the most recent assessment will be used for advising purposes.

A \$5 charge will be made to the student to cover the cost of the reassessment.

Part 2. Procedure for Implementation

- * A student seeking to reassess his/her skills must present a completed and signed CPT Reassessment Request form.
- * A fee of \$5 per CPT reassessment must be paid at the Student Payment office prior to taking the CPT reassessment.
- * A paid receipt must be attached to the CPT Reassessment Request form.

Nursing Student Success Program Policy 3.3.2

Student success and retention is a major concern shared by colleges and nursing educators. National findings indicate large numbers of pre-nursing and nursing student failures are associated with the students not being prepared for higher educational demands. Nurse researchers agree the best time to identify the high-risk pre-nursing students is at the beginning of their academic career.

Lake Superior College is committed to student success, and this commitment is demonstrated in the development and support of the Pre-Nursing Student Success Program. This program is focused on the assessment and strengthening of academic skills required for successful completion of nursing studies, a science based curriculum. The Nurse Entrance Test (NET) is used to assess math, reading, and critical thinking skills germane to the science-based nursing studies. College-level courses are available to strengthen the NET identified at-risk academic skills. This policy collaborates with and is supported by the MnSCU Board Policy Chapter 3- 3:3 Assessment for College Readiness. College Placement Test (CPT) scores and developmental course placement supersede the NET scores. Implementation of the Pre-Nursing Success Program occurs after the successful completion of the CPT assessment process.

Early needs identification and implementation of educational supportive strategies are a benefit to the pre-nursing student, the college, and faculty, serve the following purposes:

1. Supporting students by focusing on the identification and strengthening of academic skills, reducing personal pain and financial concerns from failing, and providing the student with resources to actualize their academic goals.
2. Increasing college retention, demonstrating a higher success rate in college-level courses, and graduation rates; reducing financial burden on the college from early failures.
3. Supporting stronger academically prepared nursing students, resulting in a stronger nursing graduate and life-time learner in the nursing profession.

Part 1. Policy Statement

All pre-nursing students will complete the process for admission to the college. Completing the process is a requirement for admittance into the nursing department. All incoming pre-nursing students will complete the following registration steps prior to registering for classes.

1. If required, a student will complete the New Student Registration Session (Exceptions see LSC Policy, Assessment for College Course Placement Policy 3.3)

Students who score below the minimum standards on the Computerized Placement Test (CPT) will be required to successfully complete the required developmental education courses with a grade of 'C' or better. Next, the student will attend a New Student Registration Session to meet with an advisor to proceed to NET testing.

2. Attend a mandatory Pre-Nursing Orientation meeting.
3. Complete the Nurse Entrance Test.

Students eligible to take the NET:

- a. Students who are not required to complete the New Student Assessment Session (see exceptions in policy 3.3 Assessment for College Course)
- b. Students who score above the minimum standards for the LSC Nursing Program on the Computerized Placement Test (CPT).
- c. Students who have successfully completed the required Nursing Program's developmental placement classes with a "C" or above.

NET Testing Guide:

- a. Students with scores at or above minimum standard scores (math 57% and reading 53%) may continue with the registration process.
- b. Students with scores below minimum national standard scores can retake the indicated NET at-risk areas (math and/or reading) once for the same price. The retake test will be no sooner than one month from the last testing date. Students are provided this time to prepare for the retake.
 - a) Students who achieve retake scores at or above the minimum standard scores (math 57%, reading 53%) will continue with the registration process.
 - b) Students who do not retake the indicated at-risk areas, or students with retake scores below the Nursing Program's minimum standard scores, will be required to register for NET strengthening courses.
 - c) Students are required to complete the NET strengthening courses with a "C" or better, and achieve at or above minimum national standard scores in a NET post test. If post test scores are not at or above the national average scores, the students will not be accepted into the nursing program.
4. Acceptance to the LSC Nursing Program
 - a. Students have followed the pre-nursing registration process; and
 - b. Students who have successfully completed LSC's Nursing Program's developmental courses with a "C" or better, as indicated by the CPT, with post-test scores at or above national average scores; or
 - c. Students who have taken the NET and have achieved at or above national average scores in math (57%) and reading (53%); or
 - d. Students have, if required, successfully completed the Nursing Program's NET strengthening courses with a "C" or better, with post-test scores at or above national average scores.

Part 2. Definitions

The following definitions are important for interpretation of the Pre-Nursing Student Success Program:

Pre-nursing student: A declared nursing major in the pre-technical academic phase of nursing studies.

Nurse Entrance Test (NET): A specialized diagnostic testing tool developed to identify at-risk pre-nursing student's skills in math, reading, and critical reading. Placed in the first semester of general studies, a significant correlation is found between NET predictor data and second semester academic nursing student outcomes.

NET developed strengthening courses: College level courses in math, critical reading, and science skills, providing the curriculum to strengthen the student's skills as indicted by the NET.

Nursing Student Success Program - Procedure Policy 3.3.3

Pre-Nursing Students Enter Lake Superior College

1. Enrollment Services provides the student with an Acceptance Packet The packet includes:

- a. Acceptance letter
- b. Student Checklist
- c. Program Admission List
- d. New Student Assessment Session appointments, if required
- e. Information on nursing programs offered at LSC
- f. Mandatory Pre-Nursing Orientation meeting, dates and times
- g. Nurse Entrance Test (NET) information

Students who score below the minimum standards on the Computerized Placement Test (CPT) will be required to successfully complete appropriate developmental education courses with a grade of 'C' or better. The student will attend a New Student Registration Session to meet with an advisor to proceed to NET testing.

2. Mandatory Pre-Nursing Meeting. All pre-nursing students will contact the Health NET tester for an appointment for the pre-nursing meeting. A nursing faculty member will conduct the meeting.

Students will be given information on:

- a. Nursing programs offered at LSC
 - b. The procedure steps to registration and acceptance into the nursing program.
 - c. NET testing information
 - d. Resources available to prepare for the test.
3. NET appointment and testing fee paid. Testing appointments and payment of testing fees will be done by the Health NET Tester.

Students will be required to successfully complete appropriate developmental education courses with a grade of 'C' or better, then proceed to a New Student Registration Session to meet with an advisor before registering, paying for and taking the NET.

4. NET Testing

The Health NET Tester is responsible for the testing sessions, providing students with copies of their testing scores, and maintaining testing records.

Students eligible to take the NET:

- a. Students who are not required to complete the New Student Assessment Session (see exceptions in policy 3.3 Assessment for College Course).
- b. Students who score above the minimum standards for the LSC Nursing Program on the Computerized Placement Test (CPT).

- c. Students who have successfully completed the required Nursing Program's developmental placement classes with a "C" or above. After testing, the Health NET Tester will provide the students with:
 - A copy of the testing results (needed for admission into the nursing program).
 - A guide for interpreting the results.
 - Written steps to register depending on their NET outcome.

5. NET Testing Guide

- a. Students with scores at or above minimum standard scores (math 57% and reading 53%) will continue with the registration process.
- b. Students with scores below minimum national standard scores can retake the indicated NET at-risk areas (math and/or reading) once for the same price. The retake test will be no sooner than one week from the last testing date. Students are provided this time to prepare for the retake. The Health NET Tester is responsible for taking appointments, taking the fees, and administering the retake tests.
 - a) Students who achieve retake scores at or above the minimum standard scores (math 57%, reading 53%) will continue with the registration process.
 - b) Students who do not retake the indicated at-risk areas, or students with retake scores below the Nursing Program's minimum standard scores, will be required to register for NET strengthening courses.

6. NET Strengthening Classes:

- a. Students must complete the NET strengthening courses with a "C" or better, if required.
 - b. A NET post-test (math and/or critical reading) will be available to the students when they have completed the NET strengthening classes. Students are required to achieve at or above minimum national standard scores.
 - c. If post-test scores are not at or above the national average scores, the students will not be accepted into the nursing program.
7. Acceptance to the Nursing Programs at Lake Superior College
- a. Students have followed the pre-nursing registration process.
 - b. Students have taken the NET and achieved at or above national average scores in math (57%) and reading (53%).
 - c. Students have, if required, successfully completed the NET strengthening courses with a "C" or better.

Students have post test scores at or above national average scores.

Admissions Policy 3.4

Part I. Admissions Standards

Lake Superior College considers all applicants, regardless of religious affiliation, race, ethnic heritage, gender, age, sexual orientation, or physical ability. Lake Superior College will admit:

1. Graduates of a high school or the equivalent, GED (General Equivalency Diploma).
2. Current high school students who meet Postsecondary Enrollment Options program or concurrent enrollment criteria, or
3. Individuals without a high school diploma who take the assessment test and meet ability to benefit standards.

Exceptions:

1. Students who have been suspended or expelled for disciplinary reasons from any postsecondary institution may be denied admission to Lake Superior College.

2. Students who have been suspended or expelled for academic reasons from any postsecondary institution will be denied admission to Lake Superior College. Admission that was granted based on in-progress grades at another postsecondary institution will be rescinded upon receipt of final grades if those grades render the student as failing to meet Lake Superior College satisfactory academic progress standards. Students who enter on probation from another postsecondary institution will be placed on probation at Lake Superior College.

Part 2. Admissions Requirements

A. All applicants must submit:

1. Lake Superior College or Minnesota State Colleges and Universities application form.
2. Non-refundable \$20 application fee.
3. High school transcript mailed directly from the high school (only required if obtained less than five years ago), or GED Completion Certificate (only required if obtained less than five years ago).
4. Official transcripts from each higher educational institution attended.

NOTE: Transcripts may not be faxed. Transcripts must arrive at LSC in a sealed envelope directly from the institution attended.

5. International students must satisfy additional requirements for admission. (Contact the Enrollment Services Center for specific requirements and/or see policy 3.4.1 on International Student Admissions.)
6. High school students seeking admission under the Post-Secondary Enrollment Options (PSEO) program must satisfy additional requirements for admission. (Contact the Enrollment Services Center for specific requirements and/or see policy 3.5 on Post-Secondary Enrollment Options.)

Part 3. General Provisions

1. Appeals

- a. Students who are denied admission on the basis of the published requirements may appeal the decision by submitting a Petition available in the Student Services Center.
- b. Students who are denied admission based on their academic standing at a previously attended institution may submit a Suspension Appeal to be considered for admission.

2. Documentation

- a. Applicants who are unable to present traditional documentation of required admissions items shall be individually evaluated on the basis of guidelines consistent with the institution's identity and mission.

3. Program Admissions Requirements

- a. Admission to Lake Superior College does not automatically qualify a student for all courses and curricula of the college; some programs and/or course offerings have special prerequisites. Academic, fiscal, and facilities considerations may also limit admission to particular programs.
- b. Qualified applicants should be aware that program class sizes are limited, which may delay acceptance into the program after the prerequisites are completed. Program applicants are grouped by the term in which their prerequisites are completed and then ranked by their file completion/program change date. Students who have the prerequisites completed first with the earliest file completion date will have the highest priority on the list. Prerequisites and other program entrance requirements include but are not limited to: GPA, specific coursework, background checks, and/or drug/alcohol testing. Check with individual program for specific policies.

- c. If an LSC student is on a second or subsequent suspension from LSC, he or she will be removed from any and all program admission lists.

4. Re-Admission

- a. Students who have previously attended LSC but have been away from the college for a period of one year or longer must re-submit an application with official copies of transcripts from other colleges attended since their last attendance at LSC.
- b. Current LSC students who have completed one or more LSC programs and wish to begin a second or subsequent LSC program must re-submit an application to the college.

5. Partnership Programs

- a. Students applying for admission to a partnership program offered in cooperation with another college or university are subject to all admissions requirements referred to in the Admissions policy.
- b. Lake Superior College will waive the application fee for students applying to a program offered in partnership with another MnSCU institution if the applicant has paid an application fee at the partnering institution.

International Student Admissions Policy 3.4.1

International Students

International applicants (new or transfer) who are not permanent residents or citizens of the United States may be considered for admission after submitting the following:

1. Completed Lake Superior College application
2. Non-refundable \$20 application fee
3. High school transcript (must be equivalent to a United States high school transcript)
4. Proof of high school graduation must be provided
5. Proof of English proficiency (testing is required for all applicants whose native language is not English). Acceptable documentation of English proficiency includes:
 - a. TOEFL (Test of English as a Foreign Language) score of 500 or more
 - b. Michigan Test score of 75 or more
 - c. English Language Services (ELS) Language Center (such as Hamline University) recommendation range of 17-20
 - d. English Program for International Students at the University of Minnesota recommendation: "exempt from further ESL - ready for full-time academic load"
6. Affidavit of Financial Support Form
7. F-1 visa issued by the U.S. Consulate or Immigration and Naturalization Service
8. All international students and visiting scholars engaged in educational activities are required to purchase the Minnesota State Colleges and Universities international student accident and illness insurance plan, unless they can provide written verification that their government or sponsoring agency accepts full responsibility for any medical claims that may occur.

Note: Health insurance must be maintained while attending Lake Superior College. International students must maintain a 12-credit load each semester.

Immunizations Policy 3.4.2

Part 1. General Information

1. Minnesota law (M.S.135A.14) requires that all students born after 1956 and enrolled in more than one class in a public or private postsecondary school in Minnesota be immunized against diphtheria, tetanus, measles, mumps, and rubella.
2. All enrolled students must submit the required documentation within 45 days of the beginning of their first semester.
3. The Minnesota Department of Health and the American College Health Association recommend targeted tuberculin skin testing for all international students originating from (and other students traveling to) countries where TB is endemic.

Part 2. Exception

1. No proof of immunization is needed for students who are assumed up-to-date due to requirements imposed by their previous school enrollment. These include:
 - a. students who graduate from a Minnesota high school in 1997 or later, and
 - b. transfer students from a different postsecondary school in Minnesota, if transcripts or other information from the previous school indicate that the student has met immunization requirements.
2. students who will be completing ALL of their coursework online are exempt.
3. Students who provide a notarized statement indicating they have not been immunized due to their conscientiously held beliefs.
4. Student submits a clinic document that shows: a) that for medical reasons, the student did not receive an immunization; b) that the student has experienced the natural disease against which the immunization protects; c) that a laboratory has confirmed the presence of adequate immunity.

Postsecondary Enrollment Options (PSEO) Policy 3.5

Part 1. General Information/Policy

PSEO enables 11th and 12th grade Minnesota students to enroll in courses or programs in an eligible postsecondary institution for secondary and postsecondary credit, at no cost to the student. The specific purposes of these programs are to promote rigorous educational pursuits and provide a wider variety of options for students. In order to enroll at Lake Superior College, the student must discuss the program with the high school counselor and meet the following requirements.

A student needs a signed PSEO form from the high school counselor or principal verifying eligibility for enrollment. A 12th grade student is eligible and may be considered for enrollment if the high school certifies the student as being at or above the 50th percentile in class rank. An 11th grade student is eligible and may be considered for enrollment if the high school certifies the student as being at or above the 66th percentile in class rank. If the high school does not compute rank, a student may be admitted on the basis of an overall GPA of 2.5 or greater if in the 12th grade, and of 3.0 or greater if in the 11th grade. The high school counselor, principal, or other authorized official, may petition for an exception to the above standards indicating that the student could benefit from college courses, and is recommended for admission.

Lake Superior College reserves the right to exclude enrollment in certain courses/programs with differential tuition and/or special fees.

The PSEO program is not available during the summer term.

Part 2. Procedure for Implementation

- A. High School Options Program
 1. The High School Options Program offers high school students the opportunity to take Lake Superior College courses through individual enrollment.
 2. Deadlines for application:
 - Fall term - June 10
 - Spring term - December 10
 3. Completed application received by LSC Student Services which includes:
 - a. Lake Superior College Application for Admission
 - b. State PSEO form
 - c. High School Guidance Counselor or Home School Parent Form
 - d. High School transcript
 - e. Official transcripts from any previous colleges attended (if applicable)
 4. Completion of Assessment/Placement test. Students must meet LSC course requirements in order to qualify for PSEO. Most courses require college level reading, sentence skills, and math.
 5. PSEO students shall not enroll in developmental courses (courses numbered below 1000).
 6. PSEO students who wish to continue at LSC after their high school graduation must contact the Student Services Center to re-apply and pay the \$20 application fee.
- B. High School Honors Online Program (HOL)
 1. HOL provides Lake Superior College online courses for high school students through an agreement with the high school.
 2. High school students must meet the PSEO eligibility criteria as verified by the high school counselor.
 3. HOL students are exempt from the New Student Assessment.
 4. All HOL students are enrolled using the LSC High School Registration form that is sent from the high school staff to the LSC High School Connections staff.
 5. HOL students shall not enroll in developmental courses (courses numbered below 1000).
 6. HOL students who wish to continue at LSC after their high school graduation must contact the Student Services Center to apply and pay the \$20 application fee.
- C. Concurrent Enrollment Program (CEP)
 1. Concurrent Enrollment high school students may take college level classes taught by high school instructors as part of the regular high school curriculum through an agreement with the high school.
 2. For Liberal Arts courses, CEP students must meet the PSEO eligibility criteria as verified by the high school counselor.
 3. For Technical Education courses, CEP students must meet the LSC course prerequisites as verified by the high school counselor.
 4. CEP students are exempt from the New Student Assessment.
 5. CEP students are enrolled using the LSC High School Registration form that is sent from the high school staff to the LSC High School Connections staff.
 6. CEP students shall not enroll in developmental courses (courses numbered below 1000).
 7. CEP students who wish to continue at LSC after their high school graduation must contact the Student Services Center to apply and pay the \$20 application fee.

Student Code of Conduct

Policy 3.6

Part 1. Purpose and Basis for Authority

The Lake Superior College Student Code of Conduct serves two purposes: the first purpose is to serve as a guide for student behavior; the second purpose is to outline the procedures to be followed, both by students and college officials, should violations of the Code occur. It is expected that all students will read this code and will be responsible for knowing and abiding by its content.

In the eyes of the College, two authorities guide a student's conduct while on campus or while participating in off-campus, college-sponsored activities. First, as a citizen of the larger community, each student is expected to abide by the rules, regulations, and policies of the College as well as local, state, and federal laws.

Part 2. Philosophy

As an institution dedicated to teaching and learning, Lake Superior College has a vested interest in maintaining an environment in which students are free to pursue their academic interests and responsibilities. Conduct that unreasonably restricts such freedom and interferes with the College mission of promoting student learning is subject to regulation and/or sanction by the College. The creation of such an environment is premised on the assumption that students have both rights and responsibilities. Therefore, a major function of the College is to guarantee student rights, yet to demand student responsibility.

Part 3. Student Rights

The rights of students of Lake Superior College derive both from their status as students and from their status as citizens of the state and nation. These rights include, but are not limited to, the following:

1. Students have the right to freedom from discrimination or harassment on the basis of race, ethnicity, gender, sexual orientation, religion, creed, political beliefs, national origin, or disability.
2. Students have the right to be safe and free from all physical violence.
3. Students have the right to expect that their personal property will be safe from theft, damage, and destruction.
4. Students have the right to accurate and timely information regarding academic issues, such as course requirements and expectations, and graduation requirements.
5. Students have the right to expect that all of their records will be maintained in accordance with the Family Educational Rights and Privacy Act of 1974.
6. Students have the right to fair and impartial treatment and due process in the investigation of any alleged violation.
7. Students have the right to expect fair, consistent, and appropriate discipline, in line with the disciplinary policies authorized by the MnSCU Board, if they are found guilty of violating a rule or regulation.
8. Students have the right to grieve actions and policies which they consider unfair and inconsistent.
9. Students have the right to freely engage in inquiry and discussion – the cornerstone of education at Lake Superior College. Therefore, in accordance with the guarantees of federal and state constitutions, students have the right to speak, write, and discuss freely all ideas relevant to their educational development.

Part 4. Conduct Violations

Students are responsible for knowing of and abiding by all the rules and regulations of Lake Superior College. Many of these rules and regulations are simply extensions of those existing in the larger

community, and some are unique to the college setting. These rules and regulations apply to both campus and off-campus college-sponsored activities. Violations of these rules and regulations will result in disciplinary action. Penalty procedures for academic misconduct are addressed in Part 7 of this policy. Violations will include, but not be limited to, the following:

1. Intentionally or recklessly interfering with college or college-sponsored activities including, but not limited to, teaching, research, college administration, fire, police or other emergency services, ceremonial events, scheduled interviews, extracurricular activities or other functions on college premises or officially-arranged college activities off campus.
2. Intentionally, recklessly or negligently causing physical harm to any person. This includes engaging in any form of fighting.
3. Physically detaining or restraining any other persons or removing such persons from any place where they are authorized to remain.
4. Intentionally, recklessly or negligently placing any person under mental duress or causing any person to be in fear of physical danger through verbal abuse, harassment (including repeated phone calls), sexual harassment, hazing, intimidation, threats or other conduct which threatens or endangers that person's emotional, mental or physical well-being.
5. Criminal sexual behavior including, but not limited to, the implied use or threatened use of force to engage in any sexual activity against a person's will and/or engaging in such behavior with a person who is unconscious, substantially mentally impaired (including intoxicated); intentionally touching another person's genitals, buttocks, or breasts without the person's consent; indecent exposure; voyeurism.
6. Use or possession of weapons unless expressly authorized by the college. "Weapon" is broadly defined to include, but is not limited to, all firearms (including BB guns), dangerous knives, explosives, explosive fuels, dangerous chemicals, billy clubs, and fireworks.
7. Intentionally or recklessly activating a fire alarm without cause; damaging fire safety equipment or initiating a false report; warning or threat of fire, explosion or other emergency.
8. The use, possession or distribution of any controlled substance or drugs and/or drug paraphernalia.
9. Use, possession or distribution of alcohol except as expressly permitted by college policy.
10. Reporting to campus or to a campus-sponsored activity while under the influence of a controlled substance, except as prescribed by a physician, which affects alertness, coordination, reaction, response, judgment, decision making, or safety.
11. Use of any tobacco product in campus buildings or classrooms including a lighted cigarette, cigar, or pipe; the use of any smoking material; or use of smokeless tobacco.
12. Knowingly furnishing false information to college personnel; or the knowledgeable passing of an insufficient funds check or fraudulent money order in payment of any financial obligation to the college.
13. Forgery, unauthorized alteration or unauthorized use of any college document or instrument of identification.
14. Theft, attempted theft, unauthorized borrowing or use of any college property or service wherever located, or the theft, attempted theft, or unauthorized borrowing or use of public or private property.
15. Possessing, making, or causing to be made any key to operate locks or locking mechanisms without proper authorization, including using or giving to another a key for which there has been no proper authorization.
16. Unauthorized presence in, or use of college premises, facilities or property.
17. Refusing to depart from any property or facilities of the college upon direction by college officials or other persons authorized within the regulation of the college.

18. In-line skating, roller skating, or skateboarding in all college buildings.
19. Unauthorized or fraudulent use of college facilities, telephone system, mail system, computer system, or use of any of the above for any illegal act or any act prohibited by the Code of Conduct.
20. Deliberate destruction of, damage to, malicious use of, or abuse of property, wherever located, or the deliberate destruction, damage to or malicious use of public or private property.
21. Failure to comply with the directions of college officials including, but not limited to, faculty or administrators acting in the performance of their duties; failure to present identification upon request of college personnel in the performance of their duties.
22. Gambling for money or other things of value on campus or at college-sponsored activities except as permitted by law.
23. Falsely claiming to represent the college or a student organization of the college.
24. Actions which unreasonably interfere, obstruct or prevent the regular and essential operations of the college or infringe upon the rights of others to freely participate in its programs and services. This may include, but is not limited to, intentionally and substantially interfering with the freedom of expression of others; participating in a campus demonstration which disrupts the normal operations of the college, intentionally obstructing or interfering with the freedom of pedestrian or vehicular movements on campus.
25. Violation of published college policies, rules or regulations including, but not limited to, smoking, solicitation, distribution of literature, sexual harassment, and amplification and loudspeaker use.
26. Parties and/or large gatherings which disturb the peace of the campus community or off-campus neighborhoods.
27. Apparent or alleged violation of local ordinances, federal or state laws where said violation poses a substantial threat to the safety and/or welfare of campus community members.
28. Attempts and complicity: attempts to commit acts prohibited by this code, or encouraging others to commit acts prohibited by this code will be punished to the same extent as if one had committed the prohibited act.
29. Interfering with the judicial procedures or outcomes including, but not limited to, falsification, distortion or misrepresentation of information before a hearing officer or judicial panel; knowingly initiating a complaint without cause; or failure to comply with the sanction(s) imposed by either a hearing officer or administration.
30. Hazing, "an act which endangers the mental or physical health or safety of a person, subjects a person to public humiliation or ridicule, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group, organization, or athletic team." Disciplinary action can be taken against both individuals and organizations for hazing violations, whether occurring on or off campus. Officers will serve as the representatives of the organization during any hearing.

Part 5. College Sanctions for Conduct Violations

The following sanctions may be imposed for misconduct:

1. Warning. Issuance of a written warning, admonition, or reprimand, and may include a referral for counseling.
2. Probation. Continuance at the college but only under special conditions for a specified period of time.
3. Loss of Privileges. Denial of specified privileges for a designated period of time or exclusion from participation in the extracurricular activities of the college, including the holding of any student office, for a period of time not to exceed one academic year.
4. Restitution. Required reimbursement for damage to or misappropriation of property. This may take the form of appropriate services or other compensation.
5. Community Service. Set number of hours of uncompensated service to the college or a community agency.
6. Discretionary sanctions. Work assignments, service to the college, counseling or referral to community agencies, rehabilitative programs, or other related discretionary assignments. Failure to participate as directed may result in the imposition of additional sanctions.
7. Confiscation. Confiscation of property or goods used or possessed in violation of college rules and may not be subject to return to the student.
8. Trespass. Denial of rights to access the college premises or specified areas within the college, either permanently or within a specified period of time.
9. Administrative and legal sanctions up to and including expulsion and referral for prosecution may be imposed on students who violate local, state or federal law.
10. Suspension. Denial of the privilege of enrollment for a specified period of time after which the student is eligible to return. During this time the student cannot qualify for graduation, register for or attend classes or other college functions.
11. Summary Suspension. A suspension imposed without an informal or formal hearing to ensure the safety and well-being of members of the college. This shall include an oral or written statement from the Vice President of Student Services that the student is violating or has violated college rules and may be subject to more severe sanctions.
12. Expulsion. Permanent denial of the privilege of enrollment at the college.

More than one of the sanctions listed above may be imposed for any single violation.

Other than college suspension or expulsion, disciplinary sanctions shall not be made part of the student's permanent academic record but shall become part of the student's confidential record.

Part 6. Judicial Process and Procedures

Allegations of discrimination, protected class harassment (including sexual harassment), or sexual violence, as well as academic dishonesty, shall be adjudicated under separate procedures in accordance with the college policies on these issues, but violators may be subject to the sanctions described in the Student Code of Conduct.

Student Rights and Due Process

Disciplinary action against individual students or groups of students must be administered in the context of a unified and coordinated set of campus regulations and processes to ensure fair, equitable and legal outcomes. Each person involved in the administration of the Student Code of Conduct of Lake Superior College will set as a goal the fair, objective and humane approach in all conduct cases. Consistent treatment in disciplinary action is another goal. Each case, however, must be recognized as a highly individual matter, and consistency for the sake of consistency should not be the dominant concern.

Those involved in administering the Student Code of Conduct should be aware that their efforts are primarily directed toward:

1. Protecting the integrity and order of the institution, and the morale and reputation of faculty, students and staff.
2. Educating the student involved with the conduct process so that he/she may learn to discipline himself/herself and accept responsibilities of membership in the college community.

3. Helping the student gain insight into the reasons and consequences of his/her behavior so that he/she may cope with future difficult situations more successfully.

The administration of the Student Code of Conduct should also guarantee procedural fairness to an accused student. Practices in disciplinary cases may vary in formality with the gravity of the alleged offense and the potential sanctions which may be applied. Sanctions shall be commensurate with the seriousness of the offense and may include suspension/expulsion from the college community. Repeated violations justify increasingly severe sanctions. In all cases, procedural fair play requires that a student charged with misconduct be informed of the nature of the charges, given a fair opportunity to refute them, that the institution not be arbitrary in its actions, and that there be provision for appeal of a decision. Therefore, persons making charges are required to provide pertinent information in writing and, if necessary, appear at a hearing.

Procedures

I. Informal Adjudication Process

The college, through its Student Conduct Officer (Vice President of Students Services or designee) shall receive complaints against students from members of the college community, local and state agencies, and from the public. All complaints must be provided in writing to the Student Conduct Officer within ten days after becoming aware of the alleged violation.

Following the filing of an accusation against a student, the conduct officer involved shall conduct an investigation of the charges. If the accusation seems unwarranted, the conduct officer shall discontinue proceedings. If there is sufficient evidence to support the accusation, the conduct officer shall offer the accused student an opportunity to resolve the violation at an informal meeting. Prior to this meeting the student shall be given oral or written notice of the specific charges against him/her and of the evidence available to support the charge. If a mutually acceptable resolution cannot be reached during the informal meeting, including any applicable sanctions, the case shall be referred for the formal adjudication process. In all cases, the college is the formal complainant. In all cases, the accused has the right to appeal the decision of the conduct officer and may do so according to the appeal process described in the Code of Conduct.

2. Formal Adjudication Process

- a. Students referred for the formal adjudication process shall be given adequate advance notice in writing of the time, place, and date of the meeting. A student's failure to appear at the meeting shall not prevent the meeting from proceeding as scheduled. In all cases, the evidence in support of the charges shall be presented and considered.
- b. Within a reasonable time prior to the meeting, the student must be informed in writing of:
 1. the charges,
 2. the evidence to be presented against him/her, and
 3. a list of witnesses and the nature of their testimony.
- c. Proceedings shall be conducted by the Judicial Panel according to the following guidelines:
 1. Proceedings normally will be conducted in private.
 2. Admission of any person to the proceeding shall be at the discretion of the Judicial Panel.
 3. In proceedings involving more than one accused student, the Judicial Panel may, at its discretion, permit the proceedings concerning each student to be conducted separately.
 4. The person filing a complaint and the accused have the right to have an advocate present at the time of the hearing. The

advocate may be an attorney. A person filing a complaint and the accused are responsible for presenting their own cases; therefore, advocates are not permitted to speak or participate directly in any proceeding before the Judicial Panel. When there is a likelihood that a student involved in conduct proceedings will face criminal prosecution for a serious offense, it may be advisable that the student have an attorney as the advisor.

5. The accused and the conduct officer shall have the privilege of presenting witnesses, subject to the right to cross-examination by the Judicial Panel.
6. Pertinent records, exhibits and written statements may be accepted as evidence for consideration by the Judicial Panel at the discretion of the panel.
7. All procedural questions are subject to the final decision of the Judicial Panel.
8. After the meeting, the Judicial Panel shall determine whether the student violated each section of the Code which the student is charged with violating.
9. The determination shall be made on the basis of whether it is more likely than not that the accused student violated the Code.
- d. The standing Judicial Panel shall consist of an academic dean, two faculty members, one staff member, a counselor, and two student representatives nominated by the Student Senate. The Judicial Panel is chaired by a dean.
- e. There shall be a single record of the meeting before the Judicial Panel. The record shall be the property of the college.
- f. A written notice of findings and conclusion shall be provided to the student within five working days after the hearing. The notice shall inform the student of any sanctions to be imposed and of the right to an appeal. Where sanctions involve a suspension of ten days or longer, the college shall inform the student that he/she has the right to a contested case hearing under Minnesota Law (Chapter 13, MSA).

3. Appeals

- a. Following the panel's decision, a student may request an appeal hearing before the President. The request for an appeal to be heard must be submitted in writing to the Vice President of Student Services within five days of the date of the notification of the decision. The Vice President of Student Services will forward the information to the President. Failure to file an appeal or request an extension in a timely manner constitutes a waiver of any right to an appeal. The basis for an appeal will be limited to the following grounds:
 - 1) The sanction is excessively severe.
 - 2) New or newly discovered evidence of a nature which may substantially affect the outcome of the hearing.
 - 3) There was a procedural error which substantially affected the outcome of the hearing.

The appeal letter will be reviewed and, if there is adequate reason to believe that one or more of the grounds for appeal has merit, an appeal hearing will be scheduled between the accused student and the President. A student's attorney or advocate may attend this meeting if criminal charges are pending against the student. In the event that new evidence is relevant to the outcome of the decision, the President may request a re-hearing by the original panel. The President will render a decision and notify the student in writing within five days of the appeal hearing.

b. Chapter 14-Contested Case Hearing: Students who are suspended for more than ten days or are expelled may request a contested case hearing before an administrative law judge supplied by the Minnesota State Hearing Examiner's Office in Saint Paul, Minnesota. The hearing officer will issue a recommendation to the President of the college who will make the final decision.

Part 7. Summary Suspensions

In certain circumstances, the Vice President of Student Services may impose a summary suspension prior to the informal or formal proceedings described in previous articles. A summary suspension may be imposed only when, in the judgment of the Vice President of Student Services, the accused student's presence on the college campus would constitute a threat to the safety and well-being of members of the campus community or college property. Before implementing the summary suspension, the accused student shall be given oral or written notice of the intention to impose the summary suspension and shall be given an opportunity to present oral or written arguments against the imposition of the suspension. However, the refusal of a student to accept or acknowledge this notice shall not prevent the implementation of a summary suspension. Notice of the summary suspension shall be provided in writing to the student. After the student has been summarily suspended, the student shall be provided an opportunity for a formal or informal hearing within the shortest reasonable time period, not to exceed nine days. During the summary suspension, the student may not enter the campus without obtaining prior permission from the Vice President of Student Services. If the student is unavailable or incarcerated, it may not be possible to provide due process.

Part 8. Academic Misconduct

All students have the right to pursue their academic careers in an atmosphere based on honesty and trust. Acts of academic misconduct destroy that atmosphere, violate that trust, and are therefore subject to penalty. This section of the Lake Superior College Student Code of Conduct defines what acts of academic misconduct are and presents the procedure for imposing penalties for such acts. Acts of academic misconduct necessarily involve the Vice President of Academic Affairs, academic deans, department heads, and faculty. Therefore, the procedures for investigating complaints and imposing penalties for academic misconduct differ somewhat from those applied to social misconduct.

A fundamental concept of all educational institutions is academic honesty. All academic work depends upon respect for and acknowledgment of the research and ideas of others. Misrepresentation of someone else's work as one's own is a most serious offense in any academic setting. Therefore, academic misconduct in relationship to academic dishonesty, including any form of cheating and plagiarism, cannot be condoned. Academic misconduct, as referenced, includes, but is not limited to, the following:

1. Cheating: the use of unauthorized materials, methods, or information in any academic exercise, including improper collaboration (electronic or otherwise).
2. Plagiarism: the representation of the words or ideas of another as one's own, including:
 - 2.1 Direct quotation without both attribution and indication that the material is being directly quoted, e.g., quotation marks; paraphrase without attribution.
 - 2.2 Paraphrase with or without attribution where the wording of the original remains substantially intact and is represented as the author's own.

- 2.3 Expression in one's own words, but without attribution, of ideas, arguments, lines of reasoning, facts, processes, or other products of the intellect where such material is learned from the work of another and is not part of the general fund of common academic knowledge.
- 2.4 Fabrication: the falsification or invention of any information or citation in an academic exercise.
- 2.5 Fraud: the falsification, forgery, or misrepresentation of academic work, including the re-submission of work performed for one class for credit in another class without the informed permission of the second instructor; or the falsification, forgery or misrepresentation of other academic records or documents, including admission materials and transcripts; or the communication of false or misleading statements to obtain academic advantage or to avoid academic penalty.
3. Bribery or intimidation in relationship to the grading process.
4. Engaging or assisting others in any portion of the aforementioned acts.

Procedures

Informal Judicial Process

A faculty member has the right to remove a student from a class session prior to activating the informal judicial process if that student is interfering with the learning environment and the rights of other students. If a faculty member believes that misconduct warranting discipline has occurred, he/she shall inform the student concerned, both in writing and orally, and offer to confer. If the student foregoes such a conference, or if after the conference the faculty member remains convinced that misconduct warranting discipline has occurred, he/she may, among other options, treat any work in question or an entire course as unsatisfactory, informing the student thereof. Additionally or alternatively, the faculty member may refer the matter to his or her academic dean. If the dean determines that sufficient cause exists to warrant consideration of additional discipline, the dean may initiate formal hearing proceedings. The student may initiate formal hearing proceedings at any time.

Formal Judicial Process

Students have the right to appeal decisions resulting from this policy. A written appeal must be made to the Vice President of Academic Affairs within five (5) working days after written notification of the decision which is being appealed. The Vice President of Academic Affairs will make a decision and then notify the appellant.

Classroom Misconduct

Beyond the act of academic dishonesty, there are other modes of conduct that serve to undermine the academic success of students during classroom instruction. Therefore, students are prohibited from impeding an environment conducive to learning, whether it be during traditional instruction, instruction through technological means, instruction within a learning center, instruction by way of tutoring, or instruction by way of individual study on the campus of Lake Superior College. Hence, any student who is found to disrupt the educative process of another student, or other students, is subject to sanctions as described in the informal judicial process for academic misconduct. Academic misconduct, as so referenced, includes, but is not limited to, the following:

1. Being openly disruptive.
2. Engaging in verbal outburst, talking loudly to classmates independent of class discussion.
3. Talking in an openly abusive manner or disrespectful manner to the instructor and/or to classmates.
4. Disregarding verbal and/or written instruction in relationship to expected codes of conduct during classroom instruction.

5. Initiating or participating in inappropriate conduct (e.g., horseplay) that disrupts classroom activities.
6. Using any device to cause disturbance inside or outside the classroom during instruction.
7. Continuing to engage in inappropriate interaction with the instructor, after one has been counseled not to continue adverse behavior.

Part 9. Release of Information

Lake Superior College will not release to the media the results of the outcomes of disciplinary procedures resulting from its student investigations, including those which involve criminal offenses. Such records may be released to government agencies exercising jurisdiction.

Complaints Policy 3.8

Part 1. General Information

A student has the right to seek a remedy for a dispute or disagreement through a designated complaint procedure.

A complaint should be filed in the semester of occurrence, but no later than one year following.

Part 2. Complaint Procedure – Informal

This procedure is to be used when a student has a concern about his/her education at the college. The objective of the procedure is to resolve problems as quickly and efficiently as possible at the level closest to the student so the student's educational progress can continue. Nothing within this process precludes a student from seeking legal counsel at any step.

The student brings the concern to an appropriate staff or faculty member. If the student is uncomfortable with approaching the college employee directly, he/she may select an advocate (a counselor, advisor, or other staff member). The staff member or members attempt to work with the student and any other persons who are involved to resolve the problem within ten (10) working days. If the concern is not resolved satisfactorily, the student may file a formal complaint.

Part 3. Complaint Procedure – Formal

If a student is dissatisfied with the results of the informal process, a formal complaint can be filed. All formal complaints must be submitted in writing. Forms are available in the Student Services and Administrative offices and should be returned to the appropriate administrator for response. The appropriate administrator shall respond to the complaint within ten (10) working days of its receipt.

Part 4. Appeals

The student has a right to appeal the complaint decision by filing a written appeal to the college president. Appeals must be filed within ten (10) working days of receipt of the complaint decision. The president shall respond within ten (10) working days from receipt of the appeal. The decision of the president is final and binding.

If the complaint involves a MnSCU policy or actions of the college president, a student may further appeal the college decision through the Chancellor to the Board of Trustees. The decision of the Board of Trustees is final and binding.

Petition Policy 3.8.1

Part 1. Petition Policy

Students seeking an exception to any academic rule, regulation, or procedure may submit a completed Petition form to the Petition Committee for consideration. Any such petition should be filed in the semester of occurrence, but no later than one year following. Appeals of the Petition Committee decision will be heard by the Vice President of Academic Affairs, whose decision shall be final and binding.

Procedure:

1. Print out, complete and sign the form.
 - * Lake Superior College Petition Form (PDF Format)
2. Attach appropriate documentation.
3. Return the completed form to the Student Services Center.
4. The Petition Committee meets weekly.
5. You will be notified by mail of the committee's decision.
6. If you have not received notification within ten working days, contact the Student Services Center at 218-733-7612.

Cultural/Educational Trips/Travel Courses Policy 3.10.1

Part 1. General

1. All travel courses must be approved by the Academic Vice President or his/her designee.
2. Participants must be registered students for either credit or Continuing Education Units or must pay a twenty percent surcharge of tuition in addition to the cost of the trip.

Part 2. Procedures

1. A syllabus for the travel course must be approved and on record for a trip six months prior to the activity.
2. Participants must register for the travel course.
3. Participants must be 16 and older.
4. Registration must be completed and paid in full no later than eight weeks prior to departure.
5. Deposits for flight reservations are non-refundable.

Part 3. Guidelines

1. The minimum number of paid registrants must be sufficient to cover the cost of the travel course.
2. Travel funds are to be handled by coordinating faculty member as approved by the Vice President of Finance.

Add/Drop/Withdrawal Policy 3.11

Part 1. Add/Drop/Withdrawal-Fall and Spring Term

1. Students may make changes in their course schedules (drops and adds) through the fifth (5th) academic calendar day of the term. Students will not be obligated for tuition and certain fees for courses dropped within the above-specified time frame. (See Part 3 for classes starting on dates other than the standard semester start.) Students who drop within the above guidelines shall not have such courses appear on their transcripts.
2. Students have fifty-five (55) academic calendar days, beginning on the sixth (6th) academic calendar day of the semester, to withdraw from courses. A grade of "W" will appear on the transcript. Students who withdraw from all registered courses will receive a

refund based on the LSC Refund Policy. Students who are reported to be in non-attendance (see Policy 3.17.4) and assigned a grade of "FN" or who are assigned an "F" grade due to academic misconduct (see Policy 3.6) forfeit their right to withdraw from their courses.

3. Financial aid awards are calculated based on the number of credits a student is registered for at the end of the standard add/drop period.

Part 2. Add/Drop/Withdrawal-Summer Term

1. Students may add/drop a course through the fifth (5th) academic calendar day, beginning on the first day of the term.
2. Students have thirty (30) class days from the date the term begins to withdraw from courses. A grade of "W" will appear on the transcript. Students who withdraw from all registered Summer courses will receive refunds based on the LSC Refund Policy. Students who are reported to be in non-attendance (see Policy 3.17.4) and assigned a grade of "FN" or who are assigned an "F" grade due to academic misconduct (see Policy 3.6) forfeit their right to withdraw from their courses.
3. Financial aid awards are calculated based on the number of credits a student is registered for at the end of the standard add/drop period.

Part 3. Add/Drop/Withdrawal-Courses with Irregular Term Dates

1. For courses with different term dates than the standard Fall, Spring, or Summer terms, students may drop a course without financial penalties after the course has met once, but prior to the second meeting; students may withdraw until the end of the third (3rd) class session. Refunds will be granted based on the LSC Refund policy. Students who are reported to be in non-attendance (see Policy 3.17.4) and assigned a grade of "FN" or who are assigned an "F" grade due to academic misconduct (see Policy 3.6) forfeit their right to withdraw from their courses.
2. Students may add classes prior to the second (2nd) class session.
3. Financial aid awards are calculated based on the number of credits a student is registered for on the end of the 5th day of the term.

Note: If a class is dropped that begins later in the term and a student received financial aid funding for that class, the student's Financial Aid will be adjusted and repayment may be required

Fresh Start Policy 3.13

Part 1. General Information/Policy

The Fresh Start policy at Lake Superior College gives a student who has been away from LSC for a period of at least five years a one-time opportunity to establish a new GPA.

Part 2. Procedure for Implementation

Conditions:

Fresh Start cannot be granted if a student has earned a degree, diploma, or certificate from LSC and applied any of those credits towards that award. LSC awards include those earned from Duluth Technical College and/or Duluth Community College.

The student must not have been enrolled in credit-based course work at LSC for a minimum of five consecutive years prior to the point of academic forgiveness.

Upon readmission to LSC, the student must demonstrate ability by completing 15 semester credits at LSC with no grades below a "C" and a minimum credit completion ratio of at least 67%.

Students who meet the two conditions cited above should contact an advisor to complete the Fresh Start application. Applications for Fresh

Start must be submitted to the Registrar after returning to LSC and earning 15 credits (as stated above) and before earning 30 credits.

Implementation:

Once the application for Fresh Start has been approved, the Registrar will make the following adjustments to the student's transcript:

1. The transcript will be separated into two sections indicating the point of Fresh Start. Fresh Start will be indicated on the transcript.
2. No credits will be granted for any course completed or applied to any program at LSC (DTC/DCC) prior to the point of academic forgiveness. However, course titles and grades from these courses will remain on the transcript.
3. Calculation of the student's GPA will not include grades received prior to the point of Fresh Start approval.
4. Courses that are repeated are not eligible for financial aid.

Credits for Work Completed in High School Policy 3.15

A. Advanced Placement

The Advanced Placement (AP) Program is a program of college-level courses and examinations developed for secondary students to cover the material normally taught in introductory-level college courses. The AP examinations are given to students who complete AP courses (or to any student who feels prepared by independent study or other preparation to take the test). AP tests are scored on a 5-point scale. LSC shall grant credit for AP according to the following:

1. A score of 3 shall be the minimum for credit awards.
2. The same amount of credit shall be granted for scores of 3, 4, and 5 unless the higher score clearly represents more coverage of material rather than a better rate on the material, as in some mathematics sequences.
3. Credit shall be given for a specific college course if a test covers substantially similar material. If the test material does not match an existing course, students shall be given four elective credits. No course exemptions shall be granted.
4. Students shall be allowed to petition for electives to meet certain general education requirements of the A.A., A.S., or A.A.S. degrees.
5. There is no limit to the number of credits a student can earn through AP courses and tests. AP exams are not proctored at Lake Superior College.

B. Tech Prep Courses

Successfully completed Tech Prep course credits will be recorded on an LSC transcript. Students must complete a Lake Superior College Special Registration form.

Advanced Standing Policy 3.15.1

Part 1. General Information/Policy

The college may give credit toward program completion for prior work, education, and life experiences that are equivalent to the program requirements. Advanced standing may be achieved through one of the following options: credit by exam, non-collegiate experience credit, or credit transfer.

1. Credits received through advanced standing count toward graduation requirements but are not counted in Grade Point Average or minimum semester credit completion calculations and are not counted for financial aid status.

2. Responsibility for possessing and retaining the content knowledge and skills required by course requirements for which advanced standing is granted rests with the student applicant.
3. Advanced standing procedures do not supersede the time frames for drop/add, withdrawal, or any refund of tuition.

A. Credit by Exam

Students who wish to obtain credit for knowledge and experience that is parallel to the content of a particular course must follow the process outlined on the LSC Credit by Exam form obtained from the Student Services Center. Exams for credit are given at the discretion of the dean of the division. This option is limited to currently-enrolled LSC students pursuing an LSC academic award (certificate, diploma, degree).

Procedure

1. A fee of 40% of tuition cost per credit must be paid prior to the exam and is not refundable even if the student does not pass the exam or is not given credit for the course.
2. Students cannot request credit by exam for a course for which they are registered or in which they were previously enrolled.
3. All credits earned through this procedure will be recorded on an LSC transcript. No grade will be recorded on the transcript for a failed exam for credit.
4. Students are limited to one attempted credit by exam per course.
5. Students may earn up to 30 credits utilizing the credit by exam process.
6. Credit by exam credits are not considered for financial aid purposes.

B. Credit for Non-collegiate Experience

Registered students who are able to demonstrate achievement in the content of college-level courses or who have successfully completed appropriate non-collegiate educational experiences through prior work, education, and life experiences may be eligible to receive credit at Lake Superior College or have certain requirements waived. Students who wish to obtain credit for prior learning and/or experience that are parallel to the content of a particular course must follow the process outlined on the LSC Experience Documentation form obtained from the Student Services Center.

1. The student must be able to document the prior learning or demonstrate achievement.
2. The deans will consult with the appropriate faculty members before approving the acceptance of non-collegiate credits toward the general education requirements in a specific discipline or equating non-collegiate work with a specific course.
3. Non-collegiate experience must be applicable to a program, degree, or curriculum at LSC.
4. Credit may be given for the nontraditional educational experiences listed below with proof of completion.
 - a. CLEP (College Level Examination Program)
 - (1) Up to nine semester hours of credit in each of the five General Examination areas listed below for a score at or above the 50th percentile on a given test. Credit will not be given which repeats completed course work within the discipline.
 - a) English Composition with Essay
 - b) Humanities
 - c) Mathematics
 - d) Natural Science
 - e) Social Science/History
 - (2) No letter grade will be assigned.

- b. Experiential learning is credit achieved through experiential learning processes, and students must initiate a request for experiential credit prior to the official drop/add deadline for that particular course.

5. A petition must be submitted for the following general education experiences:
 - a. USAFI (United States Armed Forces Institute) courses: for subject matter tests, appropriate discipline faculty will recommend credits in consultation with the appropriate deans prior to the college accepting credits or authorizing waivers which would affect distribution requirements.
 - b. PSI (Professional Secretaries International): Individuals who have successfully completed the PSI examination in the past seven years may be eligible for LSC course work credit.
 - c. Other non-collegiate college-level learning experiences.

Procedure

1. A fee of 40% of tuition cost per credit must be paid prior to providing documentation of prior learning and is not refundable even if the student is not granted credit for the documented prior learning.
2. Students cannot request credit from prior learning for a course for which they are registered or in which they were previously enrolled.
3. All credits earned through this procedure will be recorded on an LSC transcript. No grade will be recorded on the transcript for unaccepted credit for prior learning.
4. Students are limited to one attempted credit for prior learning per course.
5. Students may earn up to 30 credits utilizing the credit for prior learning process.
6. Credit for prior learning credits is not considered for financial aid purposes.

Note: Lake Superior College has adopted the National Council for Adult and Experiential Learning (CAEL) standards.

Degrees, Diplomas and Certificates Policy 3.17

Part I. General Information/Policy

Students may graduate under their catalog of entry or exit; if they have been out of college for more than one year, they must follow the catalog of re-entry or exit. In addition, some programs may have more stringent requirements; any variations from a published catalog, or more recent planner, must be documented by petition.

Degrees, diplomas, and certificates awarded by LSC shall meet the following requirements:

Associate in Arts (A.A.) may be awarded for successful completion of programs primarily intended to provide a broad liberal arts and sciences background, and to constitute the first two years of four-year degree programs. Associate in Arts programs include 60 semester credits of completed course work, which is defined as college level with a grade point average of 2.0 or better. The requirements of the Minnesota Transfer Curriculum (MNTC) must be met. At least 20 semester credits shall be taught by faculty recommending the awarding of the degree. The residency requirement shall be reduced to 15 credits for students transferring with at least 5 credits from another MnSCU institution. For specific credit requirements within educational categories, please refer to the A.A. Program Planner and/or advisor.

Associate in Science (A.S.) may be awarded for successful completion of programs which have highly structured professional-level technical requirements, and require a college setting. Recipients of the A.S. shall be prepared for transfer to baccalaureate majors in the same field. A.S. programs include 60-72 semester credits with a grade point average of 2.0 or better. At least 20 of these credits must be earned in the LSC program awarding the degree. For specific credit requirements within educational categories, please refer to the A.S. Program Planner and/or advisor.

Associate in Fine Arts Degree (AFA) may be awarded after the successful completion of a program in a designated discipline in fine arts. The AFA degree is designed to transfer to a baccalaureate degree, as specified in an articulation agreement between Lake Superior College and specified transfer institutions. An AFA degree may be awarded after the successful completion of a program of 60 to 64 semester credits. Program credit lengths proposed to exceed 64 semester credits require special approval by the Chancellor. At least 20 semester credits shall be taught by the faculty recommending the awarding of the degree. An AFA degree shall include a minimum of 24 semester credits in general education, and general education credits shall be selected from at least six of the ten goal areas of the Minnesota Transfer Curriculum except as provided for in MnSCU Procedure 3.17.1.

Associate in Applied Science (A.A.S.) may be awarded for successful completion of programs primarily intended to prepare people for employment. A.A.S. programs include 60-72 semester credits, at least 20 earned in the LSC occupational program awarding the degree and a grade point average of 2.0 or better. Please refer to A.A.S. program planners, advisors, and/or advisors for specific category requirements. Students must meet at least one of the ten Minnesota Transfer Curriculum goals.

Diploma of Occupational Proficiency may be awarded to students who have successfully completed the prescribed curriculum and have met program requirements, including an earned cumulative grade point average of 2.0 or better. Students must earn the lesser of 1/3 of the program requirements or 10 credits in the LSC program awarding the diploma.

Certificate may be awarded for successful completion of programs which are at least one full-time academic semester in length with an earned cumulative grade point average of 2.0 or better. A certificate shall include 9-30 semester credits. Students must earn the lesser of 1/3 of the program requirements or 10 credits in the LSC program awarding the certificate.

Minnesota Transfer Curriculum

The Minnesota Transfer Curriculum is a package of 40 semester credits that will be accepted for transfer by all Minnesota Community Colleges, State Universities, and the University of Minnesota, as well as many private colleges.

Students must earn 13 credits through enrollment in Liberal Arts or Sciences courses at LSC for certification of completion of the Minnesota Transfer Curriculum.

Honors at Graduation

Associate Degrees will be awarded with High Distinction to those students graduating with an LSC cumulative grade point average of 3.75 or greater. Associate Degrees will be awarded with Distinction to those

students graduating with an LSC cumulative grade point average of between 3.50 and 3.74.

Cumulative grade point average after fall term of the year in which the student graduates is used to determine a student's honors designation as displayed in the commencement program.

**Credit Load
Policy 3.17.1**

Credit load may vary from 1 to 18 credits in a regular term (Fall and Spring Semesters) depending on a student's interest, ability and external obligations. Generally, full-time is considered 12 credits or more; however, 15-18 credits are needed during regular terms to complete most programs within the shortest possible time frame. Students wishing to take more than 18 credits in a regular term must submit a Petition with the written recommendation of an advisor for consideration by the Petition Committee. Students who are enrolled in both Reading 0455 and English 0450 are advised against enrolling in more than 12 credits.

Summer term is condensed into a shorter time period. Students are advised to take no more than 9 credits.

**Grading System
Policy: 3.17.2**

Students who complete credit courses shall be assigned grades according to the following definitions:

<u>Grade</u>	<u>Achievement</u>	<u>Grade Points Per Credit</u>
A	Superior	4
B	Above Average	3
C	Average	2
D	Below Average	1
F	Failure	0
FN	Failure for non-attendance	0
P	Passed	Not computed
P/NC	No Credit	Not computed
I	Incomplete	Not computed
V	Visitor or Audit (not earning credit)	Not computed
W	Withdrawal	Not computed
IP	Course is in progress and not completed. Applies only to selective courses with flexible dates specific to the student.	
Z	Grades either not yet submitted by instructor or class is still in session	

All required coursework as defined by the instructor must be complete before any grade will be recorded on the student's permanent transcript.

Failure for non-attendance (FN):

A grade of FN is system generated when an instructor reports that a student has not attended or has stopped attending a course. It is not a grade that an instructor can assign at the end of a semester.

Pass/No Credit (P/NC):

Some courses are graded on a "Pass/No Credit" basis. A grade of "P" indicates that the student did at least "C" level work in the course.

Incompletes (I):

A grade of "I" is to be assigned only in exceptional circumstances and is a temporary grade. A student who wishes a grade of "Incomplete" must arrange this grade with the instructor concerned. An "Incomplete" grade will change to an "F" at the end of one term (following the term in which the incomplete was received) if requirements have not been satisfactorily met. Instructors have the option of setting an earlier completion date.

Withdrawal (W):

A "W" is initiated by the student when he/she withdraws from a course after the drop/add period and prior to the end of the withdrawal deadline. Faculty cannot assign grades of "W". Students who are reported to be in non-attendance (see Policy 3.17.4) and assigned an "FN" grade or who are assigned an "F" grade due to academic misconduct (see Policy 3.6) forfeit their right to withdraw from their course(s).

Audit (V):

A student must declare that he/she is auditing a course at the time of registration. Full tuition is charged and financial aid is not available for audited courses. No credit is earned for audited courses and they do not count towards graduation.

Grade Point Average (GPA):

A student's grade point average is determined by adding all grade points and dividing by the sum of all credits attempted. Grade of A, B, C, D, F, and FN are calculated into a student's GPA.

Completion Rate:

The percentage of credits successfully earned compared to the number of credits attempted. Grades of F, FN, NC, I, W, IP, and Z are treated as credits attempted but not successfully earned.

Dean's List Policy 3.17.3

Part I.

Students who complete 6 or more credits and achieve a semester GPA of at least 3.25 will be recognized as on the Dean's List.

Non-attendance Policy 3.17.4

The purpose of the Non-attendance Policy is to appropriately assess the financial liability for students, ensure good stewardship of financial aid funds and limit the financial liability for the college.

Students are expected to regularly attend classes in which they are enrolled and abide by the College's Drop/Add/Withdrawal Policy. Students who decide to stop attending courses should immediately drop/withdraw from their class(es). Students who fail to officially withdraw from their course(s) may be assigned an FN (failure for non-attendance) grade.

Faculty will report any students who have never attended or have stopped attending class(es). Non-attendance shall be defined as follows:

1. Student who is on the class roster but has never attended;
or
2. Student missed all scheduled meetings of a class within a two week time frame without contacting the college course instructor;

or

3. A period of twenty calendar days in a distance/Internet course in which the faculty member has not received any communication or assignments from the student.

A non-attendance report made by a faculty member will result in the automatic assignment of an FN (failure for non-attendance) grade. An assigned grade of FN will prohibit a student from withdrawing from a course(s). The issuing of an FN grade will activate re-evaluation of a student's financial aid and may result in repayment as stated in the Return of Title IV Funds Policy 5.12.3.

Transfer Students Applications Policy 3.21.1

Part I. Transfer Student Applicants

Students who have attended another college or colleges must have official transcript(s) sent from the college(s) to the Student Services Center. An official transcript must be sent directly from the institution to LSC; or, if hand-carried by a student, it must be delivered unopened with the official seal intact. Student copies and faxed transcripts are not considered official. Official transcripts received at the college from previously attended postsecondary institutions will automatically be evaluated for the program in which the student is currently enrolled. Credits earned at a college or university which is accredited by a regional accrediting association (Middle State Association of Colleges and Schools-MSA, The Northwest Association of Schools and Colleges-NASC, Higher Learning Commission of the North Central Association-HLC/NCA, New England Association of Schools and Colleges/Commission on Institutions of Higher Education-NEASC-CIHE, New England Association of Schools and Colleges/Commission on Technical and Career Institutions-NEASC-CTCI, Southern Association of Colleges and Schools/Commission on Colleges-SACS-CC, Western Association of Schools and Colleges/Accrediting Commission for Community and Junior Colleges-WASC-Jr., Western Association of Schools and Colleges/Accrediting Commission for Senior Colleges and Universities-WASC-Sr.) will be accepted as equivalent courses in a student's designated program of study. Grades from another institution are not used in computing the student's Grade Point Average. Some programs may have more stringent requirements. Credits from private schools and colleges not accredited by a regional accrediting association may be accepted for transfer in some occupational courses after having been evaluated. Work completed at military schools will be accepted based on the recommendation of the Guide to the Educational Experiences in the Armed Services.

Comparability

Courses approved for transfer must be comparable in nature, content, and level and match at least 75% of the content and goals of the course syllabus for which the student is seeking equivalent credit.

Time Limit

General education and elective credits have no transfer time limit. Occupational course credits earned more than five years prior to the time of request will not be accepted for transfer; certain occupational areas may have more stringent requirements. However, students may demonstrate course content mastery by utilizing the LSC "test-out" process or by petitioning for consideration of work completed beyond the five year time limit. Students who earned developmental education credits two or more years prior to the time of the request are advised to assess in these areas through the college's College Placement Test (CPT) assessment process.

Transfer Maximum

LSC will accept a maximum of 18 semester credits from a regional accredited technical college as electives toward the A.A. degree.

Equivalency

The number of transfer credits granted per course shall not exceed the number granted by the originating institution.

Conversion

One quarter credit is equal to 2/3 semester credits.

Repeated Courses

When students repeat a transferred course, only credit for the repeated course will count toward graduation.

Developmental Course Transfer

Lake Superior College will accept equivalent developmental courses in reading, writing, and math providing equivalencies can be established. The course equivalencies will be determined by the Transfer Services Coordinator. The courses will be accepted with a zero credit value. All developmental courses must have a grade of "C" or better to be accepted in transfer. Students are advised to assess their skills in these areas if developmental education courses were taken two or more years prior to the time of the request.

Part 2. Procedure

Students must request official school transcripts from previous postsecondary institution(s) to be sent for evaluation to the following address: Student Services Center, Lake Superior College, 2101 Trinity Road, Duluth MN 55811-3399. Transfer credits are processed by the Enrollment Services Center. The official transcript remains on file in the Student Services Center. If a student changes programs, the re-evaluation will automatically occur. After evaluation, approved courses are posted on the student's academic record. Students may appeal the transfer credit evaluation by filing a petition. Petition forms are available in the Student Services Center.

Note: While LSC may accept certain credits, other colleges to which the student may subsequently transfer may not accept them. It is the responsibility of the student to maintain communication with the receiving institution.

Student Employees Policy 4.5

Part I. Definitions

Work study: A type of financial aid which is primarily need-based and for which a student must be employed in a position identified for this purpose. The financial aid funds for these positions are provided by either or both federal and state financial aid programs. Work study employment must conform to the applicable federal and/or state work study program regulations which address source of funds for the positions, placement on payroll and other terms and conditions of employment.

Student worker: A category of employment for students enrolled at Lake Superior College. Students must carry a minimum of 6 credits to be eligible as a student worker. The hiring is not necessarily dependent upon student need. Positions may be funded by any appropriate source of campus funds, and are processed through the campus student payroll system. Student eligibility is verified each enrollment term. Students may be eligible to work during the summer months provided they were

registered for a minimum of 6 credits during the previous spring term or are registered for at least 3 credits during summer session. Students may be eligible for a maximum of 20 hours per week during the academic year and 40 hours per week during the summer months. The stated maximums are to include any "workstudy" hours assigned in combination with "student worker" hours. Requests for exceptions to the parameters defined above shall be at the discretion of the President.

Unclassified student worker: A category of state employment defined by the Department of Employee Relations for students who are enrolled in colleges or universities, including those that are not part of the Minnesota State Colleges and Universities. Positions may be funded by any appropriate source of campus funds, and are processed through the state SEMA4 payroll system. Eligibility as a student must be verified every six months. Other criteria for employment are outlined in DOER Administrative Procedures.

Part 2. Wage Rates

Work Study and Student Worker: The College President is granted authority to establish wage rates for work-study students and student worker, at or above the minimum wage rate required by law. The President shall consult with the campus student association and may consult with other student groups as appropriate prior to changing wage rates.

Unclassified Student Worker: The wages and other terms and conditions of employment are prescribed within the applicable state collective bargaining agreement.

Refunds Policy 5.12

Part I. Refunds Policy

Refunds for Dropped Classes

Students may drop classes with no obligation for tuition and certain fees through the fifth day of the term. Students are obligated for payment for any classes dropped after the five-day drop/add period for Fall, Spring, and Summer terms. For courses which begin on an irregular start date, students may drop classes with no obligation for tuition and certain fees prior to the second class session. Students who drop "irregular start date" courses for which they received financial aid will be required to repay in accord with federal and state repayment policies.

If a fee for a dropped class is for the recovery of costs already incurred by the College, refund of such fees is the decision of the President.

Tuition and Personal Property Fee

No refund of tuition and personal property fee shall be provided to a student who reduces credit hours, but does not withdraw from all courses, after the drop/add period.

Student Life and State Student Organization Fees

The student life fee and state student organization fee are nonrefundable.

Fees Paid from a Financial Aid Source

If the student's fees were paid from a financial aid source, the refund is returned to the financial aid program, not the student.

Refunds for Partial Withdrawal

Refunds are not given to students who withdraw from a portion of their total credit load after the drop/add period.

Refunds for Total Withdrawal

Refunds for official total withdrawal from the College will be issued in accordance with the following schedule:

Fall and Spring Terms

Drop/Withdrawal Period	Refund %
1st through 5th academic calendar day of the term (drop)	100
6th through 10th academic calendar day of the term	75
11th through 15th academic calendar day of the term	50
16th through 20th academic calendar day of the term	25
after 20th academic calendar day of the term	0

Summer Term

Drop/Withdrawal Period	Refund %
1st through 5th class day of the term (drop)	100
6th through 10th class day of the term	50
after the 10th class day of the term	0

Active Duty with the Armed Forces**5.12.1****Part I. General Information**

Students who are members of any branch of the U.S. military reserves and who are unable to complete a term due to having been called to active duty shall to the extent possible be provided one of the following options:

- The student may be given a full refund of tuition. Students receiving financial aid who choose this option should be made aware that they may be liable for any required refunds of state or federal financial aid funds.
- The student may be given a grade of incomplete in a course and complete it upon release from active duty. Course completion may be accomplished by independent study or by retaking courses without payment of tuition. Under federal and financial aid policies, a course that is retaken this way may not be counted toward a student's enrollment load.
- If in the instructor's judgment the student has completed sufficient course work to earn a grade of C or better, the student may be given credit for completion of a course.

Students should submit to the Lake Superior College Registrar a copy of their military orders and other necessary papers.

**Return of Title IV Funds
Policy 5.12.3****Part I.**

This policy applies to students who officially or unofficially withdraw from all courses for which they are enrolled for the term and who have received Title IV funds for the term.

Definitions

The term "officially withdraw" refers to those students who complete the withdrawal process by withdrawing from all courses using the web, touch-tone registration system, or by completing the appropriate form.

The term "unofficially withdraw" refers to those students who stop attending all of their courses without withdrawing from all courses using the web or without completing the appropriate form.

The term "Title IV Funds" refers to the subsidized FFEL (Stafford) loans, unsubsidized FFEL (Stafford) loans, Federal Pell Grants and Federal SEOG.

Notifying the College of the intent to withdraw:

The college is notified of a student's intent to officially withdraw by one of the following methods:

- The student withdraws from all courses for the term using the web or touch-tone registration system. The last date the student withdraws from a course during the term is considered to be the date the student began the withdrawal process.
- The student completes and submits the appropriate withdrawal form in person at the Student Services Center. The "received" date stamped on the form is considered the date the student began the official withdrawal process.

A student's withdrawal date is defined as:

- The date the student began the College official withdrawal process as specified above, or
- The midpoint of the term when a student unofficially withdraws without notifying the College, or
- The student's last date of attendance at a documented academically-related activity if this date falls later than the date established in "a" or "b" above.

All Title IV funds will be refunded if the College cannot document that a student attended any classes within the term.

The calculation of the return of Title IV funds:

The return of Title IV funds for all charges including tuition and special fees will be prorated on a per diem basis based on the calendar days in the term up to and including the 60% point in the semester. There is no return of Title IV funds after that point.

In accordance with federal regulations, refunds are allocated in the following order:

- * Unsubsidized FFEL loans
- * Subsidized FFEL loans
- * FFEL PLUS loans
- * Federal Pell grants
- * Federal SEOG

Students will be notified in writing, mailed to last-known permanent addresses, of all refunds and charges following withdrawal.

College and Student Responsibilities:

Lake Superior College responsibilities in regard to the return of Title IV funds include:

- * providing each student with the information given in this policy,
- * identifying students who are affected by this policy and completing the Return of Title IV funds calculation for those students, and
- * returning to Title IV programs any Title IV funds that are due.

Student responsibilities include:

- * notifying the College of the student's intent to withdraw from all courses, and
- * returning to Title IV programs any funds that were disbursed directly to the student and for which the student was determined to be ineligible through the Return of Title IV Funds calculation.

Email Accounts Policy 5.2

Part 1. General Information

College use of email

Email is a mechanism for official communication within Lake Superior College. The College has the right to expect that such communications will be received, read, and acted upon in a timely fashion. Official email communications are intended only to meet the academic and administrative needs of the college community. The LSC Computer Services Department is responsible for directing the use of the email system. (See Guidelines for the Use of Official Student Email Addresses for details.) All account users must adhere to Lake Superior College Policy V.22.2, Acceptable Use of Computers and Information Technology Resources.

Part 2. Procedure for Implementation

Assignment of student email

Official LSC email accounts are created for all employees and for all admitted students. The employee addresses are all in the form [Name]@lsc.mnscu.edu. The student addresses are all in the form [Name]@lscstudents.mnscu.edu. These accounts must be activated before the College can correspond with employees and students using the official email accounts. The responsibility for activating the account falls upon each individual employee or student. The official email address will be maintained in the MnSCU Information and Student Records System (ISRS). Official email addresses will be directory information unless the students request otherwise.

Redirecting of email

If a student or employee wishes to have email redirected from their official LSC email address to another email address (e.g., @aol.com, @hotmail.com), they may do so, but at their own risk. The College will not be responsible for the handling of email by outside vendors. Having email redirected does not relieve a student from the responsibilities associated with official communication sent to his or her LSC email account. Information and warnings about forwarding are available on the LSC website (see <http://www.lsc.mnscu.edu/CompServ/eforward.htm>)

Expectations about student and employee use of email

Students and employees are expected to check their email on a frequent and consistent basis in order to stay current with College-related communications. Students and employees have the responsibility to recognize that certain communications may be time-critical. "I didn't check my email," errors in forwarding mail, or email returned to the College with "Mailbox Full" are not acceptable excuses for missing official College communications via email.

Authentication for confidential information

It is a violation of College policies, including the Student Code of Conduct, for any user of official email addresses to impersonate a College office, faculty/staff member, or student.

Privacy

Lake Superior College cannot guarantee the privacy or confidentiality of electronic documents.

Users should exercise extreme caution in using email to communicate confidential or sensitive matters, and should not assume that email is private and confidential. It is especially important that users are careful to send messages only to the intended recipient(s). Particular care

should be taken when using the "reply" command during email correspondence.

Educational uses of email

Faculty will determine how electronic forms of communication (e.g., email) will be used in their classes, and will specify their requirements in the course syllabus. This "Email Accounts Policy" will ensure that all students will be able to comply with email-based course requirements specified by faculty. Faculty can therefore make the assumption that students' official LSC email accounts are being accessed, and faculty can use email for their classes accordingly.

Acceptable Use of Computers and Information Technology Resources

Users are expected to be knowledgeable of and to fully comply with all aspects of the college's Acceptable Use of Computers and Information Technology Resources policy which defines general standards and guidelines for use of the college's technology resources including email.

Possession or Carry of Firearms Policy 5.21

Executive Summary: Students and employees acting in the course and scope of their employment are prohibited from possessing or carrying a firearm on all Lake Superior College campuses. Visitors are prohibited from possessing or carrying a firearm on the Trinity Road campus due to the existence of a school (the Creation Station) on the site. This policy does not prohibit the lawful possession or carry of firearms in campus parking areas.

Part 1. Purpose and Scope

The purpose of this policy is to establish restrictions on possession or carry of firearms applicable to Lake Superior College, in accordance with the Minnesota Citizens' Personal Protection Act of 2003, Minnesota Statutes section 624.714, and other applicable law.

Part 2. Definitions

Subpart A. Employee - "Employee" means any individual employed by Lake Superior College, including student employees.

Subpart B. Firearms - "Firearm" means a gun, whether loaded or unloaded, that discharges shot or a projectile by means of an explosive, a gas or compressed air.

Subpart C. Pistol - "Pistol" means a weapon as defined in Minnesota Statutes section 624.712, subd. 2.

Subpart D. Student - "Student" means an individual who is:

1. Registered to take or is taking one or more courses, classes, or seminars, credit or noncredit, at the College.
2. Between terms of a continuing course of study at the College, such as summer break between spring and fall academic terms; or
3. Expelled or suspended from enrollment as a student at the College, during the pendency of any adjudication of the student disciplinary action.

Subpart E. College Property - "College Property" means the facilities and land owned, leased, or under the primary control of Lake Superior College.

Subpart F. Visitor - "Visitor" means any person who is on College property, but does not include (1) an employee of the Lake Superior College acting in the course and scope of their employment; or (2) a student, when the student is on College property.

Subpart G. School – “School” means a Pre-K to 12th grade educational institution on college premises. Lake Superior College’s pre-school, the Creation Station, is considered a school by definition.

Part 3. General

No person is permitted to carry or possess a firearm on College property except as provided in this policy.

Subpart A. Employees

1. Prohibition – Employees are prohibited from possessing or carrying a firearm while acting in the course and scope of their employment, either on or off College property, regardless of whether the employee has a permit to carry a firearm, except as otherwise provided in this policy.
2. Licensed peace officers – Subpart 3.A.1. does not apply to employees who are licensed peace officers under Minnesota Statutes section 626.84, subd.1(c), when assigned by the College to public safety duties.
3. Employee reporting responsibility – An employee with a reasonable basis for believing an individual is in possession of or carrying a firearm in violation of this policy has a responsibility to report the suspected act in a timely manner, unless doing so would subject the employee or others to physical harm. Reports should be made to the Campus Security office. This policy shall not prohibit prompt notification to appropriate law enforcement authorities when an immediate threat to personal safety exists. Employees shall not make reports of a suspected violation knowing they are false or in reckless disregard of the truth.

Subpart B. Students

1. Prohibition – Students are prohibited from possessing or carrying a firearm while on College property, regardless of whether the student has a permit to carry a firearm, except as otherwise provided in this policy.
2. Licensed peace officers – This policy does not apply to students who are licensed peace officers under Minnesota Statutes section 626.84, subd. 1(c).

Subpart C. Visitors

1. Prohibition - Visitors are prohibited from possessing or carrying a firearm while on College property, except as otherwise provided in this policy.
2. Licensed peace officers – This policy does not apply to visitors who are licensed peace officers under Minnesota Statutes section 626.84, subd.1(c)

Part 4. Exceptions

Subpart A. Parking areas - This policy does not prohibit the lawful possession or carry of firearms in campus parking areas.

Subpart B. Authorized uses – This policy does not prohibit: Lawful possession or carry related to an academic use approved in writing by the College President.

Part 5. Storage in State Vehicles Prohibited

No vehicle owned, leased, or otherwise under the control of the College shall be used to store or carry a firearm, except as authorized for purposes under part 4.B.1.

Part 6. Violations

Violations of this policy by students or employees are misconduct subject to discipline, up to and including expulsion or termination.

Part 7. Referral to Law Enforcement

Lake Superior College may refer suspected violations of law to appropriate law enforcement authorities, and provide access to investigative or other data as permitted by law.

Part 8. Effect

In the event any other College MnSCU Office of the Chancellor policy or procedure is found to be in conflict with this policy, the terms of this policy shall govern.

Acceptable Use of Computers and Information Technology Resources Policy 5.22

Policy Statement

Computer and information technology resources are essential tools in accomplishing the mission of Lake Superior College. These resources must be used and managed responsibly in order to ensure their availability for the competing demands of teaching, scholarship, administration and other mission-related uses. This policy establishes responsibilities for acceptable use of Lake Superior College information technology resources.

Part I. Purpose

Subpart A. Acceptable use - College information technology resources are provided for use by currently enrolled College students, administrators, faculty, other employees, and other authorized users. College information technology resources are the property of Lake Superior College, and are provided for the direct and indirect support of the College’s educational, research, service, student and campus life activities, administrative, and business purposes, within the limitation of available College technology, financial, and human resources. The use of Lake Superior College information technology is a privilege conditioned on adherence to this policy and any procedures or guidelines adopted pursuant to this policy.

Subpart B. Academic freedom - Nothing in this policy shall be interpreted to expand, diminish, or alter academic freedom provided under a MnSCU policy, collective bargaining agreement, or the terms of any charter establishing a college library as a community or public library.

Part 2. Applicability

This policy applies to all users of Lake Superior College information technology, and to all uses of those resources, wherever located. Lake Superior College is not responsible for any personal or unauthorized use of its resources. Security of data transmitted on its information technology resources cannot be fully guaranteed.

Part 3. Definitions

Subpart A. College information technology – College information technology means all College facilities, technologies, and information resources used for information processing, transfer, storage, and communications. This includes, but is not limited to, computer hardware and software, computer labs, classroom technologies such as computer-based instructional management systems, and computing and electronic communications devices and services, such as modems, e-mail, networks, telephones (including cellular), voicemail, facsimile transmissions, video, and multimedia.

Subpart B. Transmit - Transmit means to send, store, collect, transfer or otherwise alter or affect information technology resources or data contained therein.

Subpart C. User – User means any individual, including, but not limited to, students, administrators, faculty, other employees, volunteers, and other authorized individuals using college information technology in any manner, whether or not the user is affiliated with Lake Superior College .

Part 4. Scope

Subpart A. Procedures – The College has procedures under this policy, including: security: employee use, consistent with Minnesota Statutes section 43A.38 and other applicable law; monitoring; unauthorized uses and other limitations on use.

Subpart B. Sanctions - Users who violate this policy or related procedures shall be subject to disciplinary action through appropriate channels. Violations may be referred to appropriate law enforcement authorities.

V.22.2a Procedure - Acceptable Use of Computers and Information Technology Resources

Procedure - Acceptable Use of Computers and Information Technology Resources Policy 5.22.1

Part 1. Purpose

Subpart A. Acceptable use – This procedure establishes responsibilities for acceptable use of Lake Superior College information technology resources. College information technology resources are provided for use by currently enrolled Lake Superior College students, administrators, faculty, other employees, and other authorized users. College information technology resources are the property of Lake Superior College, and are provided for the direct and indirect support of the College's education, research, service, student and campus life activities, administrative, and business purposes, within the limitations of available college technology, financial and human resources. The use of Lake Superior College information technology is a privilege conditioned on compliance with Policy 5.22.2, this procedure, and any procedures or guidelines adopted pursuant to this procedure.

Subpart B. Academic freedom - Nothing in this procedure shall be interpreted to expand, diminish, or alter academic freedom provided under MnSCU Board policy, a system collective bargaining agreement, or the terms of any charter establishing a college library as a community or public library.

Part 2. Applicability

This procedure applies to all users of Lake Superior College information technology, whether or not the user is affiliated with Lake Superior College and to all uses of those resources, wherever located. Lake Superior College is not responsible for any personal or unauthorized use of its resources, and security of data transmitted on its information technology resources cannot be guaranteed.

Part 3. Definitions

Subpart A. Security measures - Security measures means processes, software, and hardware used by system and network administrators to protect the confidentiality, integrity, and availability of the computer resources and data owned by the College or its authorized users.

Security measures include, but are not limited to, monitoring or reviewing individual users accounts for potential or actual policy violations and investigating security related issues.

Subparts B. College Information technology – College information technology means all facilities, technologies, and information resources used for information processing, transfer, storage and communications. This includes, but is not limited to, computer hardware and software, computer labs, classroom technologies such as computer-based instructional management systems, and computing and electronic communications devices and services, such as modems, e-mail, networks, telephones (including cellular), voicemail, facsimile transmissions, video, and multimedia materials.

Subpart C. Transmit - Transmit means to send, store, collect, transfer, or otherwise alter or affect information technology resources or data contained therein.

Subpart D. User - User means any individual, including, but not limited to, students, administrators, faculty, other employees, volunteers, and other authorized individuals using College information technology in any manner, whether or not the user is affiliated with Lake Superior College.

Part 4. Responsibilities of All Users

Subpart A. Compliance with applicable law and policy

1. Users must comply with laws and regulations, MnSCU and Lake Superior College policies and procedures, contracts, and licenses applicable to their particular uses. This includes, but is not limited to, the laws of libel, data privacy, copyright, trademark, gambling, obscenity, and child pornography; the federal Electronic Communications Privacy Act and the Computer Fraud and Abuse Act, which prohibit "hacking" and similar activities; state computer crime statutes; Student Code of Conduct; applicable software licenses; and Board policies 1.B.1, prohibiting discrimination and harassment; 1.C.2, prohibiting fraudulent or other dishonest acts; and 3.26, concerning intellectual property.
2. Users are responsible for the content of their personal use on College information technology, and any liability resulting from that use.
3. Users must use only College information technology they are authorized to use and use them only in the manner and to the extent authorized. Ability to access information technology resources does not, by itself, imply authorization to do so.
4. Users are responsible for use of College information technology under their authorization.

Subpart B. Unauthorized use

1. Users must not:
 - a. Use any account or password assigned by the college to someone else.
 - b. Share any account or password assigned to the user by the college with any other individual, including family members; or
 - c. Allow others to use College information technology resources under their control in violations of this procedure or related laws and policies, including, but not limited to, copyright laws or license agreements.
2. Users must not circumvent, attempt to circumvent, or assist another in circumventing security controls in place to protect the privacy and integrity of data stored on College information technology.

3. Users must not change, conceal, or forge the identification of the person using the College information technology, including, but not limited to, use of e-mail.
4. Users must not download or install software onto the College's information technology without prior authorization from appropriate campus or MnSCU officials, except when necessary to meet the academic mission.
5. All electronic communicators, including e-mail, web postings, etc are subject to libel laws, academic misconduct penalties, and harassment-related prohibitions as outlined in college policies.
6. Users must not engage in inappropriate uses, including:
 - a. illegal activities;
 - b. wagering or betting;
 - c. harassment, threats to or defamation of others, stalking, and/or illegal discrimination;
 - d. fund-raising, private business, or commercial activity unrelated to the mission of Lake Superior College, as determined by the Director of Public Information and Governmental Affairs;
 - e. storage, display, transmission, or intentional or solicited receipt of material that is or may be reasonably regarded as obscene, sexually explicit, or pornographic, including any depiction, photograph, audio recording, or written word, except as such access relates to the academic pursuits of a Lake Superior College student or professional activities of a Lake Superior College employee; and
 - f. "spamming" through widespread dissemination of unsolicited and unauthorized e-mail messages including chain letters;
 - g. Promotional advocacy;
 - h. Advertisement of events or items for sale or rent that result in personal gain or revenue for non-college departments, programs or approved organizations.

Subpart C. Protecting privacy - Users must not violate the privacy of other users and their accounts, regardless of whether those accounts are securely protected. Technical ability to access others' accounts does not, by itself, imply authorization to do so.

Subpart D. Limitations on use – Users must avoid excessive use of the College's information technology. Excessive use means use that is disproportionate to that of other users, or is unrelated to academic or employment-related needs, or that interfere with other authorized uses. The college may require users to limit or refrain from certain uses in accordance with this provision. The reasonableness of any specific use shall be determined by the College Administration in the context of relevant circumstances.

Subpart E. Unauthorized trademark use – Users must not state or imply that they speak on behalf of the College, and must not use College trademarks or logos without prior authorization. Affiliation with the College does not, by itself, imply authorization to speak on behalf of the College.

Part 5. System Employee Users

All employees of Minnesota State Colleges and Universities are subject to Minnesota Statutes section 43A.38, the code of ethics for employees in the executive branch. In addition to compliance with that statute and this procedure, it is expected that employees will use the traditional communication rules of reasonableness, respect, courtesy, and common sense when using the College's information technology.

Subpart A. Personal use – In accordance with Minnesota Statutes section 43A.38, subdivision 4, Lake Superior College employees may

make reasonable use of the College's information technology for personal communications as long as the use is in accordance with state law, Board policy, and System procedure, and the use, including the value of employee time spent, does not result in an incremental cost to the state, or results in an incremental cost that is so small as to make accounting for it unreasonable or administratively impracticable, as determined by the Office of the Chancellor and the College.

Subpart B. Union activities – Employees shall not use the College's technology resources for union activities except as authorized by law and applicable collective bargaining agreements. Prohibited uses include campaigning for union office, union organizing activities, political activities, fundraising, and solicitation of employees for union membership. In the interest of maintaining effective labor-management relationships and efficient use of College time and resources, College e-mail systems may be used by employee representatives of the union for certain union activities, in accordance with applicable collective bargaining agreements. Union use of electronic communication technology is subject to the same conditions as employee use of such technology, as set forth in Policy 5.22. and this procedure, including security and privacy provisions.

Subpart C. Political activities – College employees shall not use the College's information technology for political activities prohibited by Minnesota Statutes sections 43A.32 or 211B.09, or other applicable state or federal law.

Subpart D. Religious activities - College employees shall not use College information technology in a manner that creates the impression that the College supports any religious group or religion generally in violation of the Establishment Clause of the First Amendment of the United States Constitution or Article 1, Section 16 of the Minnesota State Constitution.

Part 6. Security and Privacy

Subpart A. Security - Users shall take appropriate security measures, including the appropriate use of secure facsimiles or encryption or encoding devices, when electronically transmitting data that is not public.

Subpart B. Privacy – Data transmitted via College information technology are not guaranteed to be private. Deletion of a message or file may not fully eliminate the data from the system.

Subpart C. Right to employ security measures – The College reserves the right to monitor any use of the College's information technology, including those used for personal purposes. Users have no expectation of privacy for any use of the College's technology resources, except as provided under federal wiretap regulations (21 U.S.C. sections 2701-2711). The College does not routinely monitor individual usage of its information technology resources. Normal operation and maintenance of the College's information require the backup and caching of data and communications, the logging of activity, the monitoring of general usage patterns, and other activities that are necessary for such services. When violations are suspected, appropriate steps must be taken to investigate and take corrective action or other actions as warranted. College officials may access data on the College's information technology, without notice, for other business purposes including, but not limited to, retrieving business-related information, re-routing or disposing of undeliverable mail, or responding to requests for information permitted by law.

Part 7. Application of Government Records Laws

Subpart A. Data practices laws – Government data maintained on the College’s information technology is subject to data practices laws, including the Minnesota Government Data Practices Act and the federal Family Education Rights and Privacy Act, to the same extent as they would be if kept in any other medium. Users are responsible for handling government data to which they have access or control in accordance with applicable data practices laws. The College shall ensure the confidentiality of electronic data in accord with the Confidentiality of Student Records policy and related procedures.

Subpart B. Record retention schedules – Official College records created or maintained electronically are subject to the requirements of the Official Records Act, Minnesota Statutes section 138.17 to the same extent as official records in any other media. Official records must be retained in accordance with the applicable approved records retention schedule appropriate for the type, nature, and content of the record. Willful improper disposal of official records may subject an employee to disciplinary action.

Part 8. Reporting of illegal activities - Illegal activities will be reported to appropriate authorities in accordance with local, state and federal law and MnSCU guidelines as determined by the College’s administration.

Part 9. Reporting of complaints – Users and others who have questions, concerns or problems regarding the use of Lake Superior College information technology should contact the Dean of Technology and the Virtual Campus.

Part 10. Reviewing requests for use of college property - Requests to use the trademarks or logos of the College shall be reviewed by the Director of Public Information and Governmental Relations.

Part 11. Security and Integrity – The Lake Superior College Technology Systems Committee shall be responsible for establishing and implementing security policies, standards and guidelines to protect the integrity of Lake Superior College information technology and its users.

Part 12. Enforcement

Subpart A. Access Limitations - Lake Superior College reserves the right to temporarily restrict or prohibit use of its information technology by any user without notice.

Subpart B. Repeat violations of copyright laws - Lake Superior College may permanently deny use of the College’s information technology by any individual determined to be a repeat violator of copyright laws governing Internet use.

Subpart C. Disciplinary proceedings – Complaints shall be investigated by the Dean of Technology and the Virtual Campus and/or designee who will make a recommendation to the appropriate administrator if sanctioning is warranted. Alleged violations shall be addressed through applicable college policies and procedures, to address allegations of illegal discrimination and harassment; Student Code of Conduct for other allegations against students; or the applicable collective bargaining agreement or personnel plan for other allegations involving employees. Appeals shall be heard in accordance with the College’s Non-discrimination policy, Student Code of Conduct or applicable collective bargaining agreements or personnel plans. Continued use of the College’s information technology is a privilege subject to limitation, modification, or termination.

Subpart D. Sanctions - Violations of this policy are considered to be misconduct under applicable student and employee conduct standards. Users who violate this policy may be denied access to the College’s information technology and may be subject to other penalties and disciplinary action, both within and outside of the College. Discipline for violations of this policy may include any action up to and including termination or expulsion.

Subpart E. Referral to Law Enforcement - Under appropriate circumstances, Lake Superior College may refer suspected violations of law to appropriate law enforcement authorities, and provide access to investigative or other data as permitted by law.

Video Surveillance and Recording Policy 5.23

Part I. General Information/Policy

Lake Superior College recognizes the need to strike a balance between an individual’s right to privacy and the institution’s duty to promote a safe environment for all community members and to protect college property. In an effort to strike this balance, an electronic video surveillance system may be employed by the college as the least intrusive means to gather useful information about activities that occur on or about the college campuses and grounds. This policy does not apply to legitimate uses of video cameras for college promotion, instruction or research purposes.

1) The purpose of the video surveillance is to:

- * Promote a safe college environment by deterring acts of harassment or violence.
- * Deter vandalism or theft of college property and to aid in the identification of individuals who commit such acts.
- * Assist law enforcement officials in the investigation of any crime that may have been committed on college property.

2) See college procedure V.23.1a for details related to the following:

- * Camera Location, Operation and Control
- * Notification of Surveillance
- * Use of Video Recordings
- * Protection of Information and Disclosure/Security and Retention of Recordings
- * Disposal or Destruction of Recordings
- * Video Monitors and Viewing

Procedure - Video Surveillance and Recording Policy 5.23.1

Part I. Purpose

- * This procedure establishes guidelines and responsibilities for the electronic surveillance system at Lake Superior College.

Part 2. Camera Location, Operation and Control

- * LSC buildings and grounds may be equipped with video monitoring devices.
- * Video cameras may be placed in areas where surveillance has been deemed necessary as a result of threats to personal safety, prior property damages, or security incidents.
- * Cameras placed outside shall be positioned only where it is necessary to protect external assets or to provide for the personal safety of individuals on college grounds or premises.
- * Cameras shall not be used to monitor private or semi-private rooms such as washrooms and offices.

- * The LSC Chief Information Officer (CIO) shall manage, control, and audit the use and security of monitoring cameras, monitors, tapes, computers used to store images, computer diskettes, and all other video records.
- * Only individuals authorized by the CIO or College President shall have access to video monitors, or be permitted to operate the controls.
- * Video surveillance cameras shall not have audio recording capabilities; or any such audio capabilities will not be enabled if they are available.

Part 3. Notification

- * Signs shall be posted to notify individuals of the area in which surveillance is conducted, hours during which surveillance is conducted (typically 24 hours per day), who within the organization is responsible for conducting surveillance, and the contact person who can answer questions about the surveillance system, including a telephone number for contact purposes.

Part 4. Use of Video Recordings

- * Video recordings of students, staff, or others may be reviewed or audited for the purpose of determining adherence to official LSC policies, LSC Student Code of Conduct (Policy III.6), and/or Minnesota State Colleges and Universities Board Policies.
- * The college may use video surveillance to detect or deter criminal offenses that occur in view of the camera.
- * Video recordings may be released to third parties in conformance with the requirements of a local, state, or federal law enforcement agency.
- * The college or its administrators may use video surveillance and the resulting recordings for inquiries and proceedings related to law enforcement, deterrence, and student discipline.
- * The college shall not use video monitoring for other purposes unless expressly authorized by the College President (or designee) or by another LSC policy or Minnesota State Colleges and Universities Board Policy.

Part 5. Protection of Information and Disclosure/Security and Retention of Recordings

- * Videos are initially recorded on a computer hard disk. Information on the hard disk is retained until such time that the hard disk becomes full and then the oldest video segments are overwritten by the newest segments.
- * No attempt shall be made to alter any part of a video recording.
- * Video recordings that may be relevant to the investigation of an incident will be transferred from the computer hard disk onto removable media such as a CD or DVD.
- * All saved video records not in use should be securely stored in a locked receptacle.

- * All video records that have been saved pending the final outcome of an incident investigation shall be numbered, dated, and retained in a location to be determined by the CIO.
- * The CIO or College President (or designee) must authorize access to all video records.
- * A log shall be maintained by the CIO of all episodes of access to, or use of recorded materials. The log shall include 1) the video number and date of recording, 2) the name of the individual or agency that was given access to the recording, 3) the date that access was given, 4) the reason that access was given, and 5) the date when access is no longer available to the individual or agency.
- * Information contained within the video access log shall be considered public information, unless prohibited by law or judicial order.
- * Video records that contain personal information used to make a decision directly affecting an individual must be retained for a minimum of one year and may be retained by the college indefinitely as a permanent archive.
- * LSC will provide reasonable security measures to prevent unauthorized access to the electronic surveillance network; however, LSC cannot guarantee that access to the network through illegal methods is impossible.

Part 6. Disposal or Destruction of Recordings

- * Copies of surveillance recordings need not be kept by the college if there have been no identified incidents within view of the surveillance cameras. In these cases, there will be no permanent record of the recordings.
- * All saved recordings shall be disposed of in a secure manner unless they are archived as part of a permanent record as stated above in Part 5. Removable media shall be shredded, burned, degaussed, or otherwise made permanently unreadable.

Part 7. Video Monitors and Viewing

- * Video monitoring for security purposes will be conducted in a professional, confidential, ethical, and legal manner.
- * Only the CIO or individuals authorized by the CIO and members of law enforcement agencies shall have access to video monitors while they are in operation.
- * Video monitors should be in controlled access areas wherever possible.
- * Video records should be viewed on a need to know basis only, in such a manner as to avoid public viewing.
- * All authorized individuals who have access to camera controls (such as pan, tilt, and zoom) will not monitor individuals based on characteristics of race, creed, color, sex, national origin, sexual orientation, marital status, disability, public assistance status, age, or inclusion in any group or class protected by state or federal law (see LSC policy IB.5.1). Camera control operators will monitor activity based on suspicious behavior, not individual characteristics.

Faculty Credentials



Joann Abercrombie-Beaupre, Practical Nursing
M.S., Nursing, University of Phoenix; B.A., Nursing, College of St. Scholastica; B.S., Health Arts, College of St. Francis; Diploma, Registered Nurse, St. Luke's School of Nursing

Deb Amys, Practical Nursing
M.A., Nursing, College of St. Scholastica; B.S., Nursing, University of Wisconsin-Milwaukee

Ginny Anderson, Communication/Theater
M.A. & B.A., Speech/Rhetorical Studies, University of Wisconsin-Superior; A.A., Lake Superior College

Lee O. Andresen, History
M.A., Political Science, University of Houston; B.A., History/Political Science, University of Wisconsin-Superior

Roslyn Andrew, ERTC\EMT,
B.S., Nursing, University of Iowa

Cynthia Annable, Respiratory Care Practitioner
B.S., Liberal Arts, Excelsior College; A.S., Respiratory Therapy, North Central Michigan College

John Arola, Counselor
M.A., Educational Psychology-Counseling, University of Minnesota Duluth; B.S., Economics, University of Minnesota Duluth; A.A., Mesabi Community College

Raula Badavinac, Dental Hygiene
B.A.S., Health Education, University of Minnesota Duluth; A.S. Dental Hygiene, University of Minnesota Duluth

Dorian Beaulieu, Art
M.A., Visual Arts/Studio Curriculum, University of Wisconsin-Superior; B.F.A., K-12 Art Education, University of Minnesota Duluth

Diane Beecher, Reading/Study Skills
M.A., Education; B.A., Sociology/English, University of Wisconsin-Superior

Mark Behning, Fire Technology and Administration
Diploma, Paramedic, Wadena Technical College; Certificate, Fire Fighter III and Fire Instructor IV, Minnesota State Firefighter Certification Board

Timothy Benson, Spanish/English
M.A., Applied Linguistics, Universidad De Las Américas-Puebla; B.A., English, University of Wisconsin-Superior

Lawrance Bernabo, English/Humanities
Ph.D. Rhetorical Studies, University of Iowa; M.A., Speech Communication and B.A., History & Political Science, University of New Mexico

Diane Bester, Practical Nursing
B.A., Nursing, College of St. Scholastica

Tonya Borgeson, Art
B.A., Art, Minnesota State University-Mankato; M.F.A. Studio Arts, Indiana State University

Dennis Bowles, Mathematics
B.A. Mathematics, St. Cloud State University

Brian Bich, Biology
M.A., Biology, University of South Dakota;
B.A., Biology/Education, Augustana College

Rebecca Bradshaw, Mathematics
M.S., Education (Curriculum, Instruction, and Assessment specialization), Walden University; B.A., Mathematics, College of St. Scholastica

Keith Brakke, Mathematics
M.S., Industrial Technology, Bemidji State University;
B.S., Recreation and Park Administration, Mankato State University

Susan Brashaw, Psychology
M.A., Educational Psychology, University of Minnesota Duluth;
B.S., Health Promotion/Wellness, University of Wisconsin-Stevens Point

Jeri Brysch, Accounting
M.B.A., Metropolitan State University;
B.A., Accounting, University of Minnesota

David Burson, AMTA, NMT, Massage Therapy
Certified Massage Therapist, Certificate, Massage Practitioner, Heartwood Institute

Karen Busch, English
M.S., English Education, Bemidji State University; B.S., English & Secondary Education, Bemidji State University

Marie Carter Brooks, Psychology
M.A., Counseling and Guidance, University of North Dakota-Grand Forks; B.S., Speech Pathology/Audiology, Psychology, Moorhead State University

Paula Castleman, Wildland Firefighting/Fire Technology
A.S., Fire Technology, Hibbing Community College

John Calcaterra, Building Construction
M.Ed., Vocational Industrial Technology Education, University of Minnesota Duluth; B.S., Industrial Education, Northern Michigan University; A.A., Industrial Education, Mesabi Community College

Pat Carey, C.P.A., Accounting
B.A., Accounting, University of Minnesota Duluth

Diek Carlson, Economics
M.A., Economics, George Mason University; B.A., Economics, St. Cloud State University

Alexander Chernyshev, Music/Piano
D.M.A., (Doctor of Musical Arts), St. Petersburg Conservatory (formerly Leningrad State Conservatory); M.A., (Master of Musical Arts), St. Petersburg Conservatory; B.A. (Bachelor of Musical Arts), Music College, Magadan, Soviet Union

Jude Collins, Human Services, Psychology
M.S.Ed., Counseling, University of Wisconsin-Superior;
B.S., Psychology Education, College of St. Scholastica

Mitch Connor, Auto Technician
Diploma, Auto Mechanics, Pine City Technical Institute; Auto Service Excellence Master Technician and Machinist Specialist; General Motors Master Technician

Barbara Cox, English/Reading/Study Skills
M.Ed., Reading/Adult Education, University of Wisconsin-Superior; B.S., Communications/Speech, University of Minnesota Duluth

Damien Cronin, Psychology
M.A., Psychology, University of Minnesota Duluth;
M.A., Theology, University of Dubuque; S.T.M., Theology, Aquinas Institute of Theology, St. Louis

W. Boyd Dallos, Communication
M.S.W., Social Work, University of Minnesota Duluth;
B.A., Communication/Psychology, University of Minnesota Duluth, LICSW

Steven Dalager, English
M.A., English, B.S., English, University of North Dakota; A.A. Northland Community College

Sherry Dalager, Reading
M.A., Reading Education, University of North Dakota;
B.S., Elementary Education and Music Education, University of North Dakota

Philip Darg, History, Political Science, Communication
M.A., Speech Communication, M.A., History/Political Science, Minnesota State University; B.A., History, University of Minnesota

Renee DeWitte, Chemistry
M.S., Paper Science & Engineering, Institute of Paper Science and Technology; B.S., Mathematics, University of Wisconsin - Stevens Point

Adrienne Dinneen, Economics, Computer Careers
B.S., Economics, Environmental & Education Emphasis, University of Minnesota Duluth

Susan Doering, Communication
M.S., Education, University of Wisconsin-Superior;
Communication Concentration; B.A.S., Vocational Technical Education, University of Minnesota Duluth; Diploma, Fashion Merchandising, Duluth Area Institute of Technology

David Driscoll, English/Humanities
M.A., English, Marquette University; M.L.S., Humanities, University of Minnesota Duluth, B.A., English and French Literature, College of St. Scholastica

Bill Dryborough, Mathematics
M.Ed. Education, University of Minnesota Duluth; B.S. Mathematics, University of Wisconsin-Superior

Patrick Dwyer, Mathematics
M.Ed., College of St. Scholastica; B.A.S., Mathematics, University of Minnesota Duluth

Bonnie Edwards, Communications
Ed.D., Business Communication, University of Minnesota;
M.Ed., Business, University of Minnesota Duluth; B.S., Business Education, Bemidji State University

Karen Ellingson, Biology
M.S., Biology, University of Minnesota Duluth;
B.A., Medical Technology, Concordia College-Moorhead

Kay Ernst, Marketing
M.A., Organizational Management, Concordia University;
B.S., Business, University of Wisconsin-Superior

Hanna Erpestad, English
M.A., English Literature, University of Minnesota Duluth;
B.A., English, University of Minnesota Duluth

Jerelyn Essig, Architectural Drafting & Design
A.S., Computer Aided Drafting, Hibbing Community College

Dana Farnham, Respiratory Therapy
M.Ed., Education, Westfield State College, Haverhill, MA;
B.A., Education, Westfield State College; A.S., Respiratory Therapy Technology, Northern Essex Community College

John Farrell, Music/Guitar
B.A., Jazz Studies, University of Minnesota
A.A.S., Music Technician, Lakewood Community College;

Linda Farrell, P.T.A.
M.A., Physical Therapy, College of St. Scholastica; B.A., Health Science

Millie Felice, Administrative Support
M.A., Organizational Management, Concordia University, St. Paul MN; B.A. Organizational Management, College of St. Scholastica; A.A.S., Administrative Support, Lake Superior College

Theresa Fish, Sociology
M.S., Sociology, University of Wisconsin-Madison;
B.A., Psychology/Sociology, University of Wisconsin-Madison

Elizabeth Fochs, Mathematics
M.A., Business Administration, University of Minnesota Duluth;
B.S., Mathematics, Bemidji State University

Paul Foster, Truck Driving
MN State CMVI Inspector and Instructor; Union Carbide-Linde
Truck Driver, MN 3rd Party CDL Examiner

Lorrie Fox, Medical Assistant Program and Practical Nursing
B.S., Liberal Arts, Excelsior College, Albany, New York;
A.S., Nursing, University of New York, Regents

Nancy Fredrickson, Radiologic Technology
R.T.(R) A.R.R.T., St. Luke's School of Radiologic Technology

Penny Fudally, Dental Hygiene
M.Ed., University of Minnesota Duluth; B.A., Biology,
University of Minnesota Duluth; A.S., Dental Hygiene,
University of Minnesota Duluth

Lawrence A. Gilbertson, Auto Body Technology
I-CAR Certified

Janice Glisczinski, Physics
M. Ed., Life Science, Earth Science, University of Minnesota;
B.A., Biology, University of St. Thomas

Dennis Godfrey, Auto Mechanics
A.A.S., Auto Technician, Wisconsin Indianhead Technical
College

Mayra Gomez, Sociology
Ph.D., Sociology, B.A. Psychology, University of Minnesota

Dairlyn Gower, Allied Health,
B.A.S., Vocational Technical Education, University of Minnesota
Duluth; Diploma, Occupational Therapy Assistant, Duluth Area
Institute of Technology

Archna Goyal, Biology
Ph.D., Botany, Kanpur University

Linda Grayson, Administrative Support
B.S., Mathematics & Business Education, University of
Minnesota Duluth

Karen Green, Psychology
Th.D., Psychology, Grace Bible College; M.A., Clinical-
Child/Developmental Psychology, Ohio State University;
B.A., Psychology, Hillsdale College

Kathleen Griffin, Dental Hygiene Program Director
M.Ed., University of Minnesota Duluth; B.S. Dental Hygiene
Education, University of Minnesota; Graduate Dental Hygienist,
University of Minnesota

Katherine A. Grosh, Mathematics
M.S., Math Education, Bemidji State University; B.S., Math
Education, Bemidji State University

Thomas Gustafson, Computer Careers
M.E., Concentration in Computer Science, University of
Minnesota Duluth; B.S., Mathematics & Natural Sciences,
University of North Dakota; Microsoft Certified Systems
Engineer (MCSE)

Kelli Hallsten, English
M.A., Rhetoric and Applied Writing, St. Cloud State University;
B.A., Literature and Writing, St. Cloud State University

Kirsi Halonen, English
M.A., English, B.A., Foreign Language Education, University of
Joensuu

Michelle Halvorson, CPR
Diploma, Practical Nursing, Lake Superior College

Richard Haney, Physical Education
B.A., Physical Education/Biology, M.A., Education, University of
Minnesota Duluth

Cynthia Hangartner, Medical Assistant
B.S., Home Economics, University of Minnesota;
Diploma, Practical Nursing, Lake Superior College

Amy Hansen, Nursing
M.S., Nursing, University of Phoenix; B.A., Nursing, College of
St. Scholastica; A.A.S., Nursing, College of St. Catherine

Susan Hartley, Geography/Geology
M.S., Geological Sciences/Earth & Space Sciences, University of
Washington-Seattle; B.A., Geology, Carleton College

Lawrence Harvey, Emergency Response Training Center

Theresa Hornstein, Biology
M.S., Education, Biology focus, University of Wisconsin-
Superior; B.S., Biology/Forestry, Michigan Tech; A.S. Muskegon
Community College

Victoria Hutson, Art
M.A., Visual Arts/Art Education, University of Wisconsin-
Superior; B.A., Art/Biology, College of St. Benedict

Betsy Ingram-Diver, Psychology
M.A., Educational Psychology, University of Minnesota Duluth;
B.A., Sociology, University of Minnesota Duluth

David Israel, Biology
M.S., Physiology, University of Minnesota; B.S., Biology,
University of Minnesota Duluth

Julius Jackson, Philosophy
Ph.D., Religion, Syracuse University; M.A., Divinity, Duke
University; B.A. Religion, Alma University

Michael Jacobs, Electronics
M.S., Vocational Education, University of Wisconsin-Stout;
B.S., Electrical Engineering, Indiana Institute of Technology

Perveen Jawaid, Physics
M.S., Physics, University of Illinois; M.S., General Physics,
University of Panjab; M.S., Physics, University of Panjab;
B.S., Physics, University of Panjab

John Jelatis, Computer Careers
B.S., Computer Science, University of Minnesota

Dianah Johnson, Radiologic Technology
R.T. (R)(M) A.R.R.T., St. Mary's School of Radiology

Jacqueline, Johnson, Medical Laboratory Technician/Phlebotomy
B.A., Medical Technology, College of St. Scholastica, Registered
ASCP

Kristina Johnson, Paralegal Studies/Legal Administrative Support
M.Ed., University of Wisconsin-Superior; B.A., English,
University of Wisconsin-Eau Claire

Sharon Johnson, Radiologic Technology
R.T. (R) A.R.R.T., St. Luke's School of Radiologic Technology

Cheryl Jost, Nursing Assistant Program Director
A.D.N., Nursing, Wisconsin Indianhead Technical College

Damon Kapke, English/ESL
M.A., English; B.A., Anthropology, University of Wisconsin-
Madison

Michele Keane, Spanish
Ed.D., Educational Leadership, University of St. Thomas; M.A.,
Experiential Education, Spanish emphasis, Mankato State
University; B.A., Spanish, English, Geography, Mankato State
University

Sharon Kemper, Communication
M.A., Communications/Theatre, University of Nebraska-Omaha;
B.A., Speech/Theatre, Bemidji State University

Brenda Koneczny, Communication
B.A. Psychology, University of Minnesota Duluth

Michael Koppy, Machine Technology
M.S., Vocational Education, University of Wisconsin-Stout;
B.S., Industrial Education, University of Wisconsin-Stout;
Diploma, Machine Technology, Anoka Technical College

Clifford Koski, Civil Engineering Technology
B.S., Forestry, University of Minnesota; Diploma, Civil
Engineering Technology, Duluth Technical College

Diana Kostrzewski, Director of Nursing
B.S., Nursing, Moorhead State University; M.S., Nursing,
University of North Dakota

Richard Kresky, CAD Engineering Technology
A.A., Technical Drafting and Design, Duluth Technical College

Melanie Kucera, Nursing Assistant
A.S., Nursing, Hibbing Community College;
Diploma, Practical Nursing, Lake Superior College

Jon Langlee, Aircraft Rescue Fire Fighting
National Registry Emergency Medical Technician; Firefighter III;
Fire Instructor II

Jody Langseth, Reading Education
M.S. Reading, University of Wisconsin; B.S. Elementary
Education, University of Wisconsin

Peter Lawson, Economics
M.S., Economics, Utah State University; B.S., Economics,
University of Minnesota Duluth; B.S., Accounting, University of
Wisconsin-Superior

Lee Leksell, C.P.A., Accounting,
B.S., Accounting, University of Minnesota Duluth

Brandon Leno, Communication/Theater
M.A., Communication, University of Wisconsin Superior; B.A.,
English Education, West Virginia University

Jon Lintula, Architectural Technology
Registered Architect; Diploma, Architectural Drafting, Duluth
Technical College

Betsy Little, Sociology
M.A., Guidance and Counseling, University of Michigan;
B.S., Home Economics and Family Life Education, Michigan
State University

Eli Mandich, Computer Careers
M.B.A., Marketing, University of Alabama; B.S., Marketing,
University of Alabama

Kim Mattevi, Physical Education

Gary Mattevi, Physical Education

Marilyn Mayry, English
M.S., Counseling, University of Wisconsin-Superior; B.S.,
English, University of Minnesota

Deeann McClain, Nursing
B.S., Nursing, College of St. Scholastica

June McLachlan, Nursing
Certificate, Family Nurse Practitioner, Winona State University;
M.S., Rural Health Nursing, University of North Dakota; B.S.,
Nursing, University of Victoria B.C.

Candy Melde, Surgical Technology
A.D.N., Nursing, Wisconsin Indianhead Technical College

Glenn Merrick, Biology
M.S., Environmental Biology, University of Minnesota Duluth;
B.A., Biology/Distributive Science, Gustavus Adolphus College

Daniel Miller, Mathematics
B.S., Mathematics, University of Minnesota Duluth

Connie Moeller, Librarian
M.S., Information Science, St. Cloud State University;
B.A., English, University of Minnesota Duluth; B.S. Library
Science, University of Wisconsin-Superior

Judy Monroe, Librarian
M.A. Library Science, University of Minnesota; M.P.H. Health
Education, School of Public Health, University of Minnesota;
B.S. Biology, University of Minnesota Duluth

Tracy Moshier, Practical Nursing
A.S. Nursing, Chippewa Valley Technical College

Gerald Niebauer, English
M.A., English Literature, University of Wisconsin-Eau Claire;
B.A., French, University of Wisconsin-Eau Claire

Mike Nilsen, Hazardous Materials
M.S., Industrial Safety, University of Minnesota Duluth;
B.A.S., Industrial Technology (Electronics), University of
Minnesota Duluth

Doug Nyquist, Civil Engineering Technology
A.A., Architectural Technology, Lake Superior College

Randall W. Oelerich, Biology
M.D., University of Minnesota School of Medicine; M.A.,
Zoology; B.A., Biology, Minnesota State University

Heidi Olson, Practical Nursing
A.S., Nursing, Lake Superior College

Janice Oltmanns, NMT, Massage Therapy
Diploma, Practical Nursing; Massage Therapy Certificate, Lake
Superior College; NMT Certified Massage Therapist

Michael O'Mara, Electronics

Jodi Ondich, Humanities
M.Div., United Theological Seminary; B.A., Religious Studies,
B.Mus., Piano Performance, St. Olaf College

Joan Ostapenko, Dental Hygiene
M.Ed., University of Minnesota Duluth; B.S., Dental Hygiene
Education and Public Health, University of Minnesota; Graduate
Dental Hygienist, University of Minnesota

Paul Ostman, Emergency Response Training Center

Sheila Packa, English
M.F.A., Creative Writing, Goddard College; B.A., Social
Development, University of Minnesota Duluth

Dale Pagenkopf, CAD Engineering Technology
B.S., Industrial Technology, University of Minnesota Duluth;
Diploma, Mechanical Drafting, Minnesota Technical Institute

Anup Parajuli, Computer Careers
B.S., Computer Science/Mathematics, Northland College

Shiaoling Peng, Mathematics
M.S., Computer Science, University of Minnesota Duluth; B.S.,
Computer Science, China Institute of Technology

Mike Pflapsen, Supervisory Management
M.Ed., University of Minnesota Duluth; B.S., Business
Administration/Marketing, St. Cloud State University

Jocelyn Pilhaja, English
M.A., English, (ESL), University of Idaho; B.A. English,
Carleton College

Kelly Rauzi, English
M.A., English, University of Minnesota Duluth; B.A.,
English/German, St. Olaf College

Kent Richards, Communications, Business Law
J.D., Law, University of Iowa; M.A., Speech/Communication,
Eastern Illinois University; B.A., Speech/Communication,
Eastern Illinois University

Dorothy Rico, Nursing
B.A., Health, Gordon College; M.A. Nursing, New York Medical
College

Erik Riker-Coleman, History
M.A., History, University of North Carolina Chapel Hill; B.A.,
History, College of Wooster

Marlise Riffel, Sociology
M.S., Sociology, Illinois State University-Normal; B.S.,
Sociology, Illinois State University-Normal

Chris Ringsred, Electronics
M.Ed., University of Minnesota Duluth; B.S., Electrical
Engineering, University of Minnesota; B.S. Physics, University of
Minnesota Duluth

Carleen Ronchetti, Practical Nursing Program Director
M.S., Nursing, University of Minnesota; B.A., Nursing, Gustavus
Adolphus College

Deanne Roquet, Environmental Science
M.S., Land Resources, Institute for Environmental Studies,
University of Wisconsin-Madison; Graduate Certificate,
Community College Teaching, University of St. Thomas;
B.S., Biological Aspects of Conservation, University of
Wisconsin-Madison

Kristin Rust, Reading
M.Ed., Reading, University of Wisconsin-LaCrosse; B.S. Social
Work, University of Wisconsin-LaCrosse

Mike Sakowski, Mathematics
M.S., Applied Mathematics & Statistics, University of
Minnesota Duluth; B.A.S., Teaching Secondary Mathematics,
University of Minnesota Duluth; B.S., Paper Science and
Engineering, University of Wisconsin-Stevens Point

Julius Salinas, Professional Pilot
M.S., Industrial Education, University of Wisconsin-Stout;
B.S., Industrial Education, Illinois State University

Bernadette Savage, Counselor
M.A., Counseling, University of Wisconsin-Superior;
B.S., English, Phillips University

Steven Schneider, Paralegal Studies
J.D. Washington and Lee University; B.A., History/Philosophy,
Coe College

Jeri Schwerin, Biology
B.S., Biology, University of Minnesota Duluth

Susan Shelerud, Practical Nursing
M.S., Nursing, Ball State University; B.S., Health Arts, College
of St. Francis; Diploma, Registered Nurse, St. Luke's Hospital
School of Nursing

June Siiter, Administrative Support
B.S., Business Education, University of Minnesota Duluth

Penny Siven, Administrative Support

Russ Stewart, Philosophy
M.A., Philosophy, Purdue University; B.A., Philosophy and Earth
Science, University of Minnesota Duluth

Julie Strelow, Nursing
M.S., Nursing, Minnesota State University Mankato;
B.S., Nursing, Minnesota State University Moorhead

Barb R. Struck, Administrative Support/Medical Secretary
Registered Health Information Technician; AHIMA-Chicago

Christopher Susag, Psychology
Ph.D., Psychology, University of Joensuu; M.A., Educational
Psychology, University of Minnesota Duluth; B.A., Social Work,
St. John's University

Amy Jo Swing, English
M.F.A., Creative Writing/English, Southwest Texas State
University; B.A., English/Creative Writing, Purdue University

Joshua Tesch, Physical Education
M.S. Exercise Science, Northern Michigan University; B.S.
Human Biology, University of Wisconsin-Green Bay

Susan Tierney, Nursing
M.S., Nursing, Ball State University; B.S., Nursing, College of
St. Benedict

Barbara Thoreson, Radiologic Technology
M.Ed., University of Minnesota Duluth; B.A.S., University of
Minnesota Duluth; RTR (M) St. Mary's Medical Center

Kent Voelkner, Math/Chemistry
M.S., Chemistry, University of Maine; B.S., Chemistry,
University of Minnesota Duluth

Mary Grace Werner, Medical Laboratory Technician/Phlebotomy
M.S., Guidance Counseling, University of Wisconsin-Superior;
B.A., Medical Technology, College of St. Scholastica; Registered
ASCP

Zbigniew Wdowiak, Mathematics
M.S., Nautical Navigation and Marine Transportation, Szczecin
Maritime Academy; M.S., Applied and Computational
Mathematics, University of Minnesota Duluth; B.S., Applied
Mathematics, University of Minnesota Duluth

Timothy C. White, Building Construction
M.Ed., University of Minnesota; B.S., Industrial Technology,
University of Wisconsin-Stout; B.S., Business Administration,
University of Wisconsin-Superior

Matthew F. Whitehill, Geography/Geology
M.S. Geology, University of Minnesota Duluth; B.S. Geology,
University of Minnesota Morris

Terry Wiens, Biology
M.S., Biology, University of Minnesota Duluth; B.S., Biology,
University of Minnesota Duluth

Judy Willoughby, Nursing
Ph.D., Exercise Physiology, University of Minnesota;
M.S., Nursing, University of Colorado-Denver; B.S., Nursing,
University of Minnesota

Jane Worley, Physical Therapist Assistant Program Director
M.S., Kinesiology, University of Wisconsin-Madison;
B.S., Physical Therapy, University of Wisconsin-La Crosse

Paula Young, Allied Health
B.A.S., Vocational Technical Education, University of Minnesota
Duluth; Diploma, Occupational Therapy Assistant Program,
Duluth Area Vocational Technical Institute

Randall Yrjanson, Commercial & Residential Wiring
Diploma, Commercial & Residential Wiring, Lake Superior
College

Administration

Beth Adams, Vice President of Student Services
M.A., Educational Psychology, University of Minnesota Duluth;
B.A., Psychology, Natural Science, College of St. Scholastica

Candace Barnack, Vice President of Academic Affairs
M.A., Communicating Arts, University of Wisconsin-Superior;
B.A., Speech Communication & English Education, University
of Wisconsin-Superior

James Berg, Dean of Liberal Arts and Science
PhD., English, M.A. English, and B.A., English, University of
Minnesota

Rody Jo Bowers-Hughes, Associate Dean
M.S., Education, University of Wisconsin-Superior; B.A., Arts,
University of Minnesota Duluth

Barry Dahl, Vice President of Technology & Virtual Campus
M.S., Accounting, Arizona State University-Tempe;
B.S., Accounting, Arizona State University-Tempe

Pamela Elstad, Dean of Allied Health and Nursing
M.A., Nursing Management, University of Wisconsin-Superior;
B.S., Nursing, University of Wisconsin-Superior

Gary Kruchowski, Director of Public Information &
Government Affairs
M.A., Management, College of St. Scholastica; B.A., Speech,
Communications and Theater Arts, University of Minnesota
Duluth

Lisa Larson, Dean of Business and Industry
Ed.D., Educational Leadership, St. Mary's University Minnesota;
M.A., Communication, Mankato State University;
B.S., Secondary Education, Northern State University

Kathleen Nelson, President
Ed.D, Educational Leadership, University of St. Thomas; M.A.,
Educational Psychology/Counseling, University of Minnesota
Duluth; B.A., English, Speech/Communications and Theater
Arts, Hamline University

Mary Nienaber, Human Resources Director,
Affirmative Action Officer
M.A., Industrial Relations, University of Minnesota, Carlson
School of Management; B.A., Anthropology, University of
Minnesota; Certified by National Society for Human Resource
Management (SHRM), Senior Professional HR (SPHR)

Susan Stenerson, Dean of Planning & Institutional Effectiveness
Ed.D Education Administration, University of Minnesota; M.Ed.,
Vocational Education, University of Minnesota Duluth; B.S.,
Fashion Merchandising, University of Wisconsin-Stout

Steve Wagner, Dean of Workforce Development and Extended
Campus Programs
M.A. Education; B.A., Psychology, University of Minnesota



The Minnesota State Colleges and Universities system comprises 32 state universities and community and technical colleges serving the higher education needs of Minnesota. The system serves about 240,000 students per year in credit-based courses and an additional 130,000 students in non-credit courses. The system produces about 30,000 graduates per year.

Dr. James H. McCormick
Chancellor, Minnesota State Colleges and Universities

MnSCU Board of Trustees

Honorable Will Antell
Honorable Duane Benson
Honorable Michael Boulton
Honorable Cheryl Dickson, Treasurer
Honorable Ivan F. Dusek
Honorable Ruth Grendahl
Honorable Clarence Hightower
Honorable Robert H. Hoffman, Chair

Honorable Carol Ley
Honorable Lew Moran
Honorable David Olson
Honorable David Paskach
Honorable Thomas Renier
Honorable Christopher Schultz
Honorable Ann Curme Shaw, Vice Chair

Index

A

A Great Place to Learn: 6
Ability to Benefit: 12
About LSC: 6
Academic Information: 17
Accountant: 24
Accreditation: 6
Active Duty with the Armed Forces: 183
Add/Drop/Withdrawal Policy: 177
Administrative Office Specialist: 24
Admissions: General Admissions Procedures: 11
Administrative Support-Legal Secretary: 25
Admissions: 8
Admissions Policy: 170
Advanced Standing Policy: 178
Affirmative Action/Equal Opportunity: 6
All Campus Student Organizations: 7
All Nations/United Multicultural Club: 7
American Dental Hygiene Association: 8
Architectural Technology: 53
Art/Ceramics Club: 7
Assessment/Placement Testing: 8
Assessment for College Course Placement Policy: 168
Associate in Arts Degree: 18
Auto Body Technology: 64
Auto Service Technology: 65
Auto Technology Club: 8
Aviation Club: 8
Aviation Management: 25

B

Basic Electronics Certificate: 53
Bookstore: 9
Brake and Suspension Technician: 66
Broadcasting Club: 8
Building Construction Technology: 54
Bulletin Boards: 9
Business Administration: 26
Business and Technology: 37
Business Careers: 24
Business Information Specialist: 26
Business Professionals of America: 8

C

Campus Student Associations Policy: 162
Campus Security Office: 9
Campus Tours: 12
Center for Student Development: 8
Child Care: 9
CISCO Certified Network Associate: 37
Civil Engineering Technology: 55, 56
CNC Machine Programmer: 62
College Democrats: 7
College Republicans: 7
College-wide Outcomes: 15
Commercial and Residential Wiring: 57
Complaints Policy: 177
Computer Aided Design Engineering Technology: 58
Computer Aided Design Fundamentals: 59
Computer Careers: 37
Computer Club: 8
Computer Literacy, PC Technician: 38
Computer Service Technician: 52
Computer Technology: 38

Computers and Information Technology Resources Policy: 185
Confidentiality of Student Records Policy: 161
Counseling & Advising Services: 9
Course Descriptions: 69
Course Repeat General Information/Policy: 167
CPT Reassessment Policy: 169
Credit Load Policy: 180
Credits for Work Completed in High School Policy: 178
Cultural/Educational Trips/Travel Courses Policy: 177

D

Dean's List Policy: 181
Degrees, Diplomas and Certificates Policy: 179
Dental Hygiene: 42
Delta Epsilon Chi: 8
Disabilities Policy: 159
Disability Services: 9
Discrimination/Harassment Investigation and Resolution Policy: 150
Driveability Technician: 66

E

Electronic Engineering Technology-Industrial Controls: 60
Electronic Engineering Technology-Wireless Communications: 61
Electronic Engineering Technology: Computer Support: 59
Electronic Technology: 61
Email Accounts Policy: 184
Environmental Club: 7
Escort Service: 9

F

Facilities: 8
Faculty Credentials: 190
Financial Aid: 9
Fire Technology and Administration: 51
Fire Technology Club: 8
Food Service: 9
Foundation: 8
Foundations of Corrections: 50
Fresh Start Policy: 178
Freshmen: 11

G

General Education Mission Statement: 15
General Information: 6
Geopak: 59
Grading System Policy: 180
Gus Gus Players Theater Club: 7

H

Health & Accident Insurance: 10
Health Care: 42
Health Insurance and Billing: 27
Health Unit Coordinator: 43
Human Resources Management: 27
Health Services: 10
Housing: 10

I

Identification Cards: 10
Immunizations Policy: 172
Information Processing Assistant: 28
Information Systems Programmer: 38, 39
International Students: 12
International Student Admissions Policy: 171

Intersarsity Christian Fellowship: 7
IT Specialist: Network Administration (MCSA/CCNA): 40
IT Specialist: Network Administration Computer Networking: 39

L

Learning Center: 10
Legal Administrative Assistant: 28
Legal Secretary: 29
Library: 10
Linux Club: 7
Lockers: 10
Lost and Found: 10
LSC Students: 7

M

Machine Technology Careers: 62
Machine Tool and Technology Club: 8
Machine Tool Operator: 63
Massage Therapist: 43
Medical Administrative Secretary: 29
Medical Assisting: 44
Medical Laboratory Technician: 44
Medical Receptionist: 30
Medical Secretary: 30
Medical Transcription: 31
Microcomputer Office User Specialist: 41
Microstation (CAD): 59
Minnesota Transfer Curriculum: 18
Minnesota Transfer Curriculum and Associate in Arts Degree Requirements: 19
Mission Statement: 5
MnSCU Board of Trustees: 196
Moldmaker/Toolmaker: 64
Multi-Cultural Center: 7

N

New Student Registration Sessions: 10
New Student Welcome Day: 10
Non-attendance Policy: 181
Nondiscrimination in Employment & Education Opportunity Policy: 149
Non-Trad Club: 7
Nursing: 45
Nursing Assistant: 46
Nursing Club: 8
Nursing Student Success Program Policy: 169

O

Office Assistant: 31
Orientation: 10
Outdoor Activity Recreation Club: 7

P

Paralegal Studies: 32
Paramedic: 52
Petition Policy: 177
Philosophy of Assessment: 15
Phi Theta Kappa: 7
Phlebotomy: 46
Physical Therapist Assistant: 47
Placement Services: 10
Policies, LSC: 149
Possession or Carry of Firearms Policy: 184
Posting Policy: 163
Postsecondary Enrollment Options Act (PSEO): 12
Postsecondary Enrollment Options (PSEO) Policy: 172
Power Limited: 62
Practical Nursing: 46
President's Welcome: 4

Professional Bookkeeper: 34
Professional Pilot: 67
Program Related Organizations: 7
Paralegal / Criminal Justice Club: 8
Physical Therapist Assistant Club: 8
Practical Nursing Club: 8
Radiological Tech Club: 8
Respiratory Care Club: 8
Programs for Transfer: 18
Public Safety Careers: 50

Q

Quality: 34

R

Radiologic Technology: 48
Refunds Policy: 182
Respiratory Care Practitioner: 49
Return of Title IV Funds Policy: 183

S

Sales and Marketing: 35
Sales Representative: 36
Security: 11
Services to Students: 8
Student Records: 10
Student Support Services (SSS): 11
Sexual Violence Policy: 154
Staff and Faculty: 6
State Residency Requirements Policy: 162
Student Activities: 7
Student Code of Conduct Policy: 173
Student Employees Policy: 182
Student Involvement In Decision Making Policy: 163
Student Life: 7
Student Life - Procedure Policy: 164
Student Life Center: 7
Student Life Policy: 163
Student Rights and Responsibilities Policy: 168
Student Senate: 7
Student Stipends Policy: 165
Students Against War: 7
Students Helping Students: 7
Students' Satisfactory Academic Progress Procedure Policy: 165
Students' Satisfactory Academic Progress Policy: 165
Supervisory Management: 36
Surgical Technology: 49
Surgical Technology Club: 8

T

Technical Programs: 24
Trade and Industry: 52
Transfer: 11
Transfer Preparation: 11
Transfer Students Applications Policy: 181
Transportation: 11
Transportation Careers: 64
Truck Driving (Over-the-Road): 67
Tuition and Fees: 13

V

Veterans Educational Benefits: 11
Video Surveillance and Recording Policy: 188
Violence Prevention Plan Policy: 157

W

Web Developer: 41, 42
Wellness Center: 11
Wilderness Pilot: 67

Notes