Appendix A

Proposed Associate of Arts Degree
### Associate of Arts Degree

**Montana State University-Northern**

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL</td>
<td>111</td>
<td>Written Composition I</td>
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<tr>
<td>CIS</td>
<td>110</td>
<td>Introduction to Computers</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Humanities Selective from Transferable Core</td>
<td>3</td>
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<td></td>
<td></td>
<td>Social Sciences Selective from Transferable Core</td>
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<td>Cultural Diversity Selective from Transferable Core</td>
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<tr>
<td>SPCH</td>
<td>141/142</td>
<td>Fundamentals of Speech</td>
<td>3</td>
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<td>Interpersonal Communication</td>
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<tr>
<td>MATH</td>
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<td>Math for Liberal Arts</td>
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<td></td>
<td>College Algebra</td>
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<td>ENGL</td>
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<td>Written Composition II</td>
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<td>Fine Arts Selective from Transferable Core</td>
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<td>History Selective from Transferable Core</td>
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**Total Credits** 60-63
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<tr>
<th>Natural Sciences (6 semester credits)</th>
<th>English (3 semester credits)</th>
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<tbody>
<tr>
<td>BIOL 140 Cell Biology (4)</td>
<td>ENGL 111 Written Communication I (3) **</td>
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<td>BIOL 141 Cell Biology Lab (1)</td>
<td>ENGL 112 Written Communication II (3) **</td>
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<tr>
<td>BIOL 151 Essentials of Biology (4)</td>
<td>Humanities (maximum of 3 semester credits)</td>
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<tr>
<td>BIOL 204 Essentials of Anatomy and Physiology (4)</td>
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<tr>
<td>BIOL 314 General Ecology (4*)</td>
<td>ENGL 114 Introduction to Literature (3)</td>
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<td>CHEM 111 General Chemistry (3)</td>
<td>ENGL 201 American Literature I (3)</td>
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<tr>
<td>CHEM 121 General Inorganic Chemistry I (3)</td>
<td>ENGL 202 American Literature II (3)</td>
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<td>CHEM 123 General Inorganic Chemistry I Lab (1)</td>
<td>ENGL 214 Introduction to World Literature (3)</td>
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<td>CHEM 122 General Inorganic Chemistry II (3*)</td>
<td>ENGL 221 English Literature I (3)</td>
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<tr>
<td>CHEM 124 General Inorganic Chemistry II Lab (1*)</td>
<td>ENGL 222 English Literature II (3)</td>
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<td>ESCI 115 Foundations of Earth Science (4*)</td>
<td>ENGL 309 Popular Genres (3)</td>
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<td>ESCI 204 Physical Geology (4*)</td>
<td>ENGL 310/510 Literature for Children and Adolescents (3)</td>
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<td>ESCI 206 Historical Geology (4*)</td>
<td>ENGL 330 Modern Literature (3)</td>
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<td>ESCI 307 Astronomy (4*)</td>
<td>ENGL 331/NAS 331 Literature by and About Native Americans (3)</td>
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<td>ESCI 310 Introduction to Paleontology (3)</td>
<td>ENGL 349/549 Montana Literature (3)</td>
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<td>GSCI 412 Environmental Problems (3)</td>
<td>ENGL 360 Survey of Dramatic Literature (3)</td>
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<td>NSCI 110 Survey of Sciences (3)</td>
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<tr>
<td>NSCI 201 Essence of Science (3)</td>
<td>ENGL 385 Shakespeare (3)</td>
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<td>PHYS 114 Foundations of Physical Science (4)</td>
<td>ENGL 401 Contemporary Literature (3)</td>
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<td>PHYS 231 Fundamentals of Physics I (3)</td>
<td>ENGL 402 Literary Criticism (3)</td>
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<td>PHYS 232 Fundamentals of Physics II (3*)</td>
<td>ENGL 409 Majors Writers (3)</td>
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<td>ESCI 310 Introduction to Paleontology (3)</td>
<td>ENGL 435 Development of the Novel (3)</td>
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<td>Social Sciences (6 semester credits)</td>
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<td>ECON 241 Microeconomics (3)</td>
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<td>ECON 242 Macroeconomics (3*)</td>
<td>FREN 205 Intermediate French (4*)</td>
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<td>ECON 346 Business and Economic History of the United States (3)</td>
<td>GER 105 Elementary German (4)</td>
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<td>POL 134 American Government (3)</td>
<td>PHIL 200 Introduction to Philosophy (3)</td>
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<td>POL 235 Political Ideologies (3)</td>
<td>PHIL 210 Ethics</td>
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<td>POL 303 American Constitution (3)</td>
<td>SPAN 105 Elementary Spanish (4)</td>
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<td>PSYC 101 Introduction to Psychology (3)</td>
<td>ART 100 Introduction to Art (3)</td>
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<tr>
<td>PSYC 205 Human Growth and Development (3)</td>
<td>ART 101 Studio Foundation (3)</td>
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<td>SOC 101 Introduction to Sociology (3)</td>
<td>ART 115 Ceramics (3)</td>
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<td>SOC 102 Social Problems (3*)</td>
<td>ART 120 Drawing I (3)</td>
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<td>SOC 240 Social Psychology (3)</td>
<td>ART 150 Two-Dimensional Design I (3)</td>
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<td>SOSC 201 Introduction to the Social Sciences (3)</td>
<td>ART 151 Two-Dimensional Design II (3)</td>
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<td>Mathematics (maximum of 3 semester credits)</td>
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<td>MATH 110 Mathematics for Liberal Arts (4) **</td>
<td>ART 204 Printmaking (3)</td>
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<td>MATH 112 College Algebra (3) **</td>
<td>ART 200 Drawing II (3*)</td>
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<td>MATH 116 Applies Statistics (3)</td>
<td>ART 254 Painting I (3*)</td>
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<td>MATH 125 Trigonometry (2)</td>
<td>ART 256 Watercolor Painting I (3*)</td>
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<td>MATH 120 Mathematics for Elementary Teachers I (3)</td>
<td>ART/METL 353 Metal Sculpture (3)</td>
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<td>MATH 121 Mathematics for Elementary Teachers II (3)</td>
<td>ART 361 Art History of Western Civilization I (3)</td>
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<td>MATH 220</td>
<td>Calculus and Analytical Geometry (5*)</td>
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<td>GDSN 270</td>
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<td>Introduction to Music Theory (3)</td>
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<td>MUS 210</td>
<td>Voice Ensemble (1*)</td>
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<td>Introduction to Music Theory (3)</td>
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<td>MUS 225</td>
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<td>MUS 301</td>
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<td>HIST 142</td>
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<td>HIST 374</td>
<td>Intellectual History of Western Civilization (3)</td>
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<td>HIST 141</td>
<td>History of Civilization I (3)</td>
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<tr>
<td>HIST 374</td>
<td>Intellectual History of Western Civilization (3)</td>
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<td>Cultural Diversity (maximum of 3 semester credits)</td>
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<td>MUS 225</td>
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<td>MUS 301</td>
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<td>NAS 105</td>
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<td>Introduction to Ethnic Indian Studies (3)</td>
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<td>NAS 310</td>
<td>Native Cultures of North America (3)</td>
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<td>American Indian Oral Tradition (3)</td>
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<td>Literature by and About Native Americans (3)</td>
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<td>NAS 350</td>
<td>Indian Law (3)</td>
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<td>NAS 364</td>
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<tr>
<td>SOC 315</td>
<td>Race, Gender, and Ethnic Relations (3)</td>
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</table>

*Course carries a college-level pre-requisite, and/or requires permission of the instructor.

**Requirement met as Fundamental Skills
Appendix B

Catalog Course Descriptions
COMPUTER INFORMATION SYSTEMS

CIS 110 Introduction to Computers
3 semester credits
A literacy based approach is used to survey the computer and the computer industry. Topics covered include: Microcomputer applications, input, processor, output, auxiliary storage, file and database management, communications, information system life cycle, program development and systems software, and trends, issues and career opportunities in the computer industry. An opportunity for hands-on work with standard software packages including word processors, electronic spreadsheets, database systems, and graphics packages is presented in lab sections. **Course Fee: $5.00**

ENGLISH

ENGL 111 Written Communication I
3 semester credits
Writing from observation, personal experience, and research, for narrative, descriptive, expository, and persuasive purposes. Emphasizes strategies for development of ideas, organization, revision, and editing applicable to any writing task. Six or more completed papers will be required.

ENGL 112 Written Communication II
3 semester credits
Emphasizes argumentation and research writing. Students will write at least six essays and a significant research paper including a thorough bibliography. Students will be introduced to library research methods, the avoidance of plagiarism, and formal documentation. Prerequisite: ENGL 111 or HON 111.

MATH 110 or MATH 112

MATH 110 Math for Liberal Arts
4 semester credits
Survey of a wide variety of topics including sets and logic, mathematical patterns, number systems, number theory, algebra, geometry, probability and statistics. The development of problem-solving skills is emphasized. Prerequisite: MATH 094, MATH 095, or placement by means of ACT scores or university placement examination.

MATH 112 College Algebra
3 semester credits
Properties and theorems of the real and complex number systems. Study of the function concept including inverse functions, graphing techniques, linear, quadratic, polynomial, exponential, and logarithmic functions. Solving systems of equations in two or more variables using matrices, determinants, and matrix algebra. Prerequisite: MATH 095 or placement by means of ACT scores or university placement examination. **Course Fee: $3.00**

SPEECH 141 or SPEECH 142

SPCH 141 Fundamentals of Speech
3 semester credits
A study and utilization of the principles and techniques of oral communication. Problems of research, preparation, content, organization, argument, and delivery are examined.

SPCH 142 Interpersonal Communication
3 semester credits
A study of the theory and application of verbal and nonverbal communication as they occur in relatively unstructured person-to-person settings.
BIOL 140 Cell Biology
4 semester credits
The structure and function of plant and animal cells, including respiration, photosynthesis, reproduction, genetics, and protein synthesis. Other topics considered are tissues, embryology, and unicellular organisms. Concurrent enrollment in BIOL 141 Lab is required.

BIOL 141 Cell Biology Laboratory
1 semester credit
Laboratory studies in cell structure and function, respiration, photosynthesis, reproduction, genetics, tissues, embryology, and unicellular organisms. Must be taken concurrently with BIOL 140. Course Fee: $12.00

BIOL 151 Essentials of Biology
4 semester credits
An introduction to biology, including chemical principles, cell structure and function, classification and characteristics of bacteria, protists, fungi, plants, and animals, and such ecological concepts as ecosystems, energy relationships, cycles, succession, and populations. Includes lecture and laboratory hours. Course Fee: $10.00

BIOL 204 Essentials of Anatomy and Physiology
4 semester credits
An introduction to the organ systems of the human body, including chemical principles, cell and tissue study, and the organ systems: muscular, skeletal, integumentary, digestive, circulatory, immune, respiratory, excretory, nervous, muscular, skeletal, endocrine, and reproductive. Includes lecture and laboratory hours. Course Fee: $8.00

BIOL 314 General Ecology
4 semester credits
Integrated principles of ecology with special emphasis on terrestrial ecosystems. Some attention directed to selected ecological methods and statistical evaluations via laboratory activities. Offered alternate years. Prerequisites: BIOL 140 or BIOL 151 or BIOL 221.

CHEM 111 General Chemistry
3 semester credits
General chemistry dealing primarily with physical states of matter, including nomenclature, atomic structure, chemical reactions, and acid-base theory. First of a two-semester sequence for majors that do not require a strong background in chemistry. Includes lecture and laboratory hours. Course Fee: $20.00

CHEM 122 General Inorganic Chemistry II
3 semester credits
Fundamental principles of inorganic chemistry: nomenclature, theoretical concepts of bonding, periodic trends, chemical reactions, state of matter, heat of reactions, gaseous nature, and free energy. Primarily for students planning to continue in chemistry and other fields requiring knowledge of chemical principles. Concurrent enrollment in CHEM 123 laboratory is required. Prerequisite: High School Algebra.

CHEM 123 General Inorganic Chemistry I Lab
2 semester credit
The laboratory portion of CHEM 121 dealing with experiments in nature of matter, gaseous state, heat of reactions, and other general principles of matter. Concurrent enrollment in CHEM 121 lecture is required. Course Fee: $22.00

CHEM 124 General Inorganic Chemistry II Lab
2 semester credits
The laboratory portion of CHEM 122 dealing with experiments in acid-base, pH, neutralization, and qualitative analysis. Laboratory techniques in the qualitative scheme are examined. Concurrent enrollment in CHEM 122 lecture is required. Prerequisite: CHEM 123. Course Fee: $25.00

ESCI 115 Foundations of Earth Science
4 semester credits
Basic concepts of geology, astronomy, meteorology, and physical geography. Selection of topics will be at the discretion of the instructor. Course includes lecture and laboratory hours. Prerequisite: MATH 120 or placement into MATH 112 or MATH 130. Course Fee: $5.00

ESCI 204 Physical Geology
4 semester credits
Introductory geology emphasizing the physical constitution of the Earth's interior and surface. Prerequisites: MATH 120 or placement into MATH 112 or MATH 130. Course Fee: $5.00

ESCI 206 Historical Geology
4 semester credits
Introductory geology emphasizing the evolution of the Earth and life through geological time. ESCI 204 is recommended. Prerequisites: MATH 120 or placement into MATH 112 or MATH 130. **Course Fee: $5.00**

**ESCI 307 Astronomy**  
4 semester credits  
Introduction to astronomical observation and measurement and features of the Solar System and phenomena found outside the Solar System. Includes lecture and laboratory hours. Offered alternate years. Prerequisite: PHYS 231.

**ESCI 310 Introduction to Paleontology**  
3 semester credits  
This course will provide an introduction to paleontology and the various procedures in the field with special emphasis on Montana and Alberta Fossils. Prerequisite: ESCI 115 or ESCI 204 or consent of instructor. **Course Fee: $10.00**

**GSCI 412 Environmental Problems**  
3 semester credits  
Review of major environmental problems facing civilization with the thought that the general awareness of these problems by the citizenry provides an important educational commitment. Such evaluations will be made in the context of basic ecological concepts and principles and will involve integration of various scientific and non-scientific disciplines. Graduate credit requirements are described in the course syllabus.

**NSCI 110 Survey of the Natural Sciences**  
3 semester credits  
Introduction to aspects of the Biological, Physical, and Earth Sciences. The biology component emphasizes the structural and functional features of organisms, their classification, and their importance in the environment. The physical science component presents a non-mathematical approach to understanding some of the basic concepts in chemistry and physics. The earth science studies focuses on the interrelationships between geology, paleontology, astronomy, meteorology and oceanography. This course is required for elementary education majors. **Course Fee: $15.00**

**NSCI 201 Essence of Science**  
3 semester credits  
A review of the historical and philosophical progression of science as it evolved, influenced the development of society and has been directed by society. A review of the significant advances in physical, chemical, and biological sciences and the role of mathematics in science. Emphasis on the intricate interrelationships between all the sciences.

**PHYS 114 Foundations of Physical Science**  
4 semester credits  
An introductory course primarily for non-science majors and students lacking high school physics and chemistry. The course includes principles of chemistry and physics. Non-algebra approach used to study mechanics, heat, fluids, atomic structure, chemical combinations, electricity, and light. **Course Fee: $10.00**

**PHYS 231 Fundamentals of Physics I**  
3 semester credits  
This is a general physics course covering measurement and experimental error, kinematics, dynamics, work and energy, momentum, rotational motion, properties of solids and fluids, thermal physics, properties of ideal gases, kinetic theory, and thermodynamics. Prerequisite: MATH 112 and MATH 125 or equivalent. MATH 125 may be taken concurrently with PHYS 231, but it is highly recommended that it be taken prior to enrollment in PHYS 231. Concurrent enrollment in PHYS 234 is required. Broadfield Science majors must take the 2 credit lab; Technology majors will take the 1 credit lab.

**PHYS 232 Fundamentals of Physics II**  
3 semester credits  
A general physics course covering properties of periodic motion, properties of waves, properties of light, geometric optics, optical instruments, wave optics and electric charge, electric field, electric potential, capacitance, electric current, resistance, magnetism, electromagnetic induction, alternating-current circuits, relativity and atomic structure. Prerequisite: PHYS 231, MATH 112 and MATH 125. Co requisite: PHYS 235. Broadfield Science majors must take 2 credits lab; Technology majors will take the 1 credit lab.

**SOCIAL SCIENCES (maximum of 6 semester credits)**

**ECON 241 Microeconomic Principles**  
3 semester credits  
Principles of rational choice, price determination, market resource allocation, competition, and the role of government in the economy. Prerequisite: University competency in math or permission of instructor.

**ECON 242 Macroeconomic Principles**  
3 semester credits  
Principles of national income and product accounting, aggregate demand and supply, employment, monetary theory, macroeconomic stabilization, and basic principles of international trade and finance. Prerequisites: ECON 241 and University competency in math. and cultural characteristics influence teaching and learning.
ECON/HIST 346 Business and Economic History of the United States
3 semester credits
Students will study the growth and development of the U.S. Economy and business transformation from colonial times to the mid-20th century. The central organizing focus concerns the economic, cultural, and constitutional incentive structures in America that have motivated entrepreneurship and efficient resource use. A background in basic economics or business theory is useful but not required.

POL 134 American Government
3 semester credits
Study of the American federal republic and political system. Focuses on the constitutional structure, limits and operation of the federal government, protection of individual rights, federal-state relations, political processes, and dynamic changes in the government system over time.

POL 235 Political Ideologies
3 semester credits
Introduction to such modern political ideologies as Classical Liberalism, Democratic and Totalitarian Socialism, Conservatism, Fascist Totalitarianism, and Environmentalism. Focuses on the nature of ideological thinking, the logic and internal structures of various ideologies, and their effects in practice.

POL 303 American Constitution
3 semester credits
A study of the origin and development of the American Constitution including the separation of powers, the Executive, Legislative, and Judicial branches of government.

PSYC 101 Introduction to Psychology
3 semester credits
An introductory survey of the scientific discipline of psychology. Attention will be given to such standard topics as the nature of empirical, scientific research, and the learning process, intelligence, perception, personality, motivation, emotion, cognitive processes, abnormal behavior, human sexuality, psi-phenomena, major systems of psychotherapy, human growth and development, psychobiology and physiology, social psychology, memory, stress, forensic and industrial psychology. Students will be guided towards an appreciation of the six major theoretical perspectives that psychology has to offer. As psychology is intended to describe, predict, understand, and to control behavior, students should emerge from the course with an increased degree of enlightened control over their lives.

PSYC 205 Human Growth and Development
3 semester credits
Human development is the study of how and why people change over time, as well as how and why they remain the same. Thus, this course will provide an overview of what is empirically known about all the periods of life from conception to death or our physical vehicles. We shall examine what is known scientifically about physical, cognitive, and psychosocial development in humans. We shall examine how changes in each one of these major areas impacts change in each of the other two. The relative importance of nature and nurture will be examined for each of the various life stages. The issues of native temperament and physical appearance will be given special emphasis as these areas impact psychosocial and cognitive development. A considerable amount of time will be devoted to what is known about methods of effective/ineffective, successful/unsuccessful parenting. Finally, we shall look at the physical, cognitive, and psychosocial aspects of our final years of life. And we shall cap off the course with a careful examination of the research knowledge on near-death experiences.

SOC 101 Introduction to Sociology
3 semester credits
Study of the concepts and principles of group behavior and of the impact which society has upon the programming of the mind and thought processes. Analysis of the components of culture and of the structure of society, as well as social organization and differentiation will also be emphasized. Introduces the essentials of micro sociology and macro sociology.

SOC 102 Social Problems
3 semester credits
A study of the antecedent causes and consequences of such major social problems as violent crime, drug abuse, alcoholism, family violence, divorce, the population explosion, war, maltreatment of the aged, juvenile vandalism, unplanned pregnancy, sexual deviance, riot behavior, religious cults and zealous fundamentalism, are provided with a sociological perspective. Key sociological theories (e.g., interactionism, functionalism, and conflict) are critically examined. Prerequisite or co-requisite: SOC 101.

SOC 240 Social Psychology
3 semester credits
Comprehensive survey of social psychology as an interdisciplinary field of inquiry. Incorporates such standard social psychology topics as socialization, communication and language, perception and beauty, attitude and attitude change, norms, social order and conformity, roles and the ways they shape personality, situational influences on behavior, interpersonal attraction, aggression and conflict, conflict resolution, group behavior and gender roles.

SOSC 201 Introduction to the Social Sciences
3 semester credits
A systematic and comparative study of the interrelationships among the traditional social sciences
MATHEMATICS (maximum of 3 semester credits)

MATH 110 Math for Liberal Arts
4 semester credits
Survey of a wide variety of topics including sets and logic, mathematical patterns, number systems, number theory, algebra, geometry, probability and statistics. The development of problem-solving skills is emphasized. Prerequisite: MATH 094, MATH 095, or placement by means of ACT scores or university placement examination.

MATH 112 College Algebra
3 semester credits
Properties and theorems of the real and complex number systems. Study of the function concept including inverse functions, graphing techniques, linear, quadratic, polynomial, exponential, and logarithmic functions. Solving systems of equations in two or more variables using matrices, determinants, and matrix algebra. Prerequisite: MATH 095 or placement by means of ACT scores or university placement examination. Course Fee: $3.00

MATH 116 Applied Statistics
3 semester credits
Study of statistics from descriptive statistics through regression analysis, correlation, and analysis of variance. Topics are investigated as they apply to real-world data. Computers and calculators are used extensively.

MATH 120 Mathematics for Elementary Teachers I
3 semester credits
Topics relating to elementary mathematics education

MATH 121 Mathematics for Elementary Teachers II
3 semester credits
Topics relevant to elementary mathematics education, including algebra, statistics, and number theory. Focuses primarily on geometric concepts. Prerequisite: MATH 120. Course Fee: $5.00

MATH 125 Trigonometry
2 semester credits
Analytic trigonometry including trigonometric and circular functions, solutions of triangles with law of sines/cosines, solutions of trigonometric equations, identities, graphs, inverse functions, and vectors. Prerequisite: MATH 112.

MATH 137 Calculus for Technology I
3 semester credits
An introduction to differential and integral calculus with emphasis on practical engineering technology applications. Prerequisites: MATH 130, MATH 133, or consent of instructor.

MATH 220 Calculus & Analytic Geometry I
5 semester credits
Developing the concepts of calculus and analytic geometry including rates of change, limits, derivatives and anti-derivatives, concepts of integration, and the application of integration. Prerequisite: MATH 130 or both MATH 112 and MATH 125.

MATH 221 Calculus & Analytic Geometry II
5 semester credits
Further development of the concepts of integration and applications, work with infinite series, plane curves, and parametric vectors and vector valued functions, and partial differentiation. Prerequisite: MATH 220.

ENGLISH COMPOSITION (maximum of 3 semester credits)

ENGL 111 Written Communication I
3 semester credits
Writing from observation, personal experience, and research, for narrative, descriptive, expository, and persuasive purposes. Emphasizes strategies for development of ideas, organization, revision, and editing applicable to any writing task. Six or more completed papers will be required.

ENGL 112 Written Communication II
3 semester credits
Emphasizes argumentation and research writing. Students will write at least six essays and a significant research paper including a thorough bibliography. Students will be introduced to library research methods, the avoidance of plagiarism, and formal documentation. Prerequisite: ENGL 111 or HON 111. devices and an in-depth study of a selected microcontroller system. Course Fee: $9.00

HUMANITIES (maximum of 3 semester credits)

ENGL 114 Introduction to Literature
3 semester credits
Study of three of the major literary forms (fiction, poetry, and drama), including examples of each from several periods. Selections will include works by and about minorities and women.

ENGL 201 American Literature I
3 semester credits
A survey of American literature from the colonial period to 1870.

ENGL 202 American Literature II
ENGL 214 Introduction to World Literature  
3 semester credits  
A historical and thematic study of world literature in translation that may include Babylonian, Hebrew, Indian, Chinese, Persian, and other literature.

ENGL 221 English Literature I  
3 semester credits  
A survey of English literature from the Old English Period to 1700.

ENGL 222 English Literature II  
3 semester credits  
A survey of English literature of the eighteenth, nineteenth, and twentieth centuries. Readings include works by the Augustans, the Romantics, the Victorians, the moderns, and the contemporary writers of Great Britain.

ENGL 309 Popular Genres  
3 semester credits  
An historical and critical approach to popular genres within the discipline that have been defined as including topics of significant aesthetic and sociological value outside the traditional canons of mainstream tradition. Material to be considered will be determined by the instructor and may include such genres as fantasy literature, science fiction, detective fiction, Gothic literature, movies, popular culture, and so on. May be repeated for credit.

ENGL 310/510 Literature for Children and Adolescents  
3 semester credits  
A study of the literature designed for and available to the pre-adult audience, from pre-school materials for reading preparation and reading aloud, through elementary school literature, to literature for the adolescent audience of the middle school and secondary school levels. Includes poetry, fairy tales, myths, epics, fables, informational and nonfiction works, biographies, popular fiction, and fantasy literature.

ENGL 330 Modern Poetry  
3 semester credits  
A study of the major trends and significant theories of poetry from 1800 to 1945; the Romantic period, the Victorian period, American Poetry and the Modern period.

ENGL 331/NAS 331 Literature by and About Native Americans  
3 semester credits  
A critical examination of a representative number of major works by non-Native Americans about Native Americans and major works by Native Americans. Topics include stereotyping, segregation, prejudice, and the roles of Native Americans in American society. Readings include mythology, poetry, essays, novels, and non-fiction.

ENGL 349/549 Montana Literature  
3 semester credits  
A study of the works of major Montana authors as these reflect upon regional experience including works appropriate for a pre-adult audience.

ENGL 360 Survey of Dramatic Literature  
3 semester credits  
A study of representative plays from Greek, Roman, Medieval, Renaissance, Restoration periods; the 18th, 19th, and 20th centuries, with attention to the cultural and historical factors contributing to the development of these works and analysis of significant ideas, themes, and production techniques.

ENGL 385 Shakespeare  
3 semester credits  
Introduction to the poetic and dramatic works of Shakespeare. Reading and analysis of representative plays from the comedies, histories, and tragedies and critical assessment of Shakespeare's historical importance in literature and culture from the 16th century to the present.

ENGL 401 Contemporary Literature  
3 semester credits  
A study of the development of the forms and themes of poetry and fiction in the period since World War II.

ENGL 402 Literary Criticism  
3 semester credits  
A study of the theories and methods of literary analysis from ancient times to the present, as represented in the works of selected literary theorists and critics.

ENGL 409 Major Writers  
3 semester credits  
An intensive study of the works of one or more major English or American writers or literary genres from the periods of literary history. The writer or writers to be studied vary at the discretion of the instructor. Prerequisite: Junior standing. May be repeated for credit.

ENGL 435 Development of the Novel  
3 semester credits  
A study of the development of the novel in England, Europe and the United States from the eighteenth century to the present.

FREN 105 Elementary French  
4 semester credits
Introduction to French, emphasizing conversational ability but including reading comprehension and written expression. Extensive use of spoken French in the classroom, small group practice sessions, and individual conferences with the instructor. Students desiring further French study may register for additional credits of French 105. Two semesters of French 105 (8 credits) constitute the first-year University French sequence. Students with prior French study should consult the instructor for placement. No prerequisite for the first semester.

**FREN 205 Intermediate French**

4 semester credits

Continued and progressive development of the skills acquired in Elementary French and special emphasis on conversational ability, vocabulary building, and the grammar necessary for correct oral and written expression. Extensive pronunciation practice to develop proper syllable division, stress, linking, and intonation. Students desiring further study may register for additional credits of FREN 205. Two semesters of FREN 205 (8 credits) constitute the second-year University French sequence.

Prerequisites: Two semesters of elementary French (8 credits) or the equivalent and permission of the instructor.

**FREN 305 Advanced Composition and Conversation**

4 semester credits

Advanced work in spoken and written French through compositions and conversations covering the modern French speaking world and the historical development of art, music, literature, philosophy, politics, science, and social institutions in France. Class conducted in French. Students desiring further French study may register for additional credits of French 305. Two semesters of French 305 constitute a third-year University French sequence. Prerequisite: two semesters of Intermediate French (8 credits) or the equivalent.

**GER 105 Elementary German**

4 semester credits

Introduction to German, emphasizing conversational ability appropriate attention to reading comprehension and correct written expression. Extensive use of spoken German in the classroom, small group practice sessions, and individual conferences with the instructor. Students desiring further German study may register for additional credits of German. Two semesters of German 105 (8 credits) constitute the first-year University German sequence. Students with prior German study should consult the instructor for placement. No prerequisite for the first semester.

**PHILOSOPHY**

**PHIL 200 Introduction to Philosophy**

3 semester credits

Introduces the major problems and questions that have concerned philosophic thinkers from classical to modern times. Principal topics include issues of knowledge, truth, personal identity, ethics, justice, freedom, and religious belief, as discussed by such diverse thinkers as Plato, Aristotle, Descartes, Locke, Hume, Kant, Mill, Russell, Sartre, Austin, Rawls, and Rorty.

**PHIL 210 Ethics**

3 semester credits

Treats the major thinkers in the development of modern ethical concepts. Principal topics include ethical theories of hedonism, self-realization, empiricism, Stoicism, utilitarianism, voluntarism, existentialism, and linguistic analysis. Ethical works discussed include those of Plato, Aristotle, Epicurus, Aquinas, Eckhart, Machiavelli, Hobbes, Spinoza, Hume, Kant, Bentham, Mill, Kierkegaard, Nietzsche, Marx, Dewey, Moore, Sartre, Ayer, Firth, Austin, and Rawls.

**SPAN 105 Elementary Spanish I**

4 semester credits

Introduction to Spanish, emphasizing conversational ability but paying appropriate attention to reading comprehension and correct written expression. Extensive use of spoken Spanish in the classroom, small group practice sessions, and individual conferences with the instructor. Students desiring further Spanish study may register for additional credits of Spanish. Two semesters of Spanish 105 (8 semester credits) constitute the first year University Spanish sequence. Students with prior Spanish study should consult the instructor for placement.

**FINE ARTS (maximum of 3 semester credits)**

**ART 100 Introduction to Art**

3 semester credits

A slide-lecture survey of the visual arts and architecture. Analytical study of specific works and techniques, and consideration of broad contexts and principles. Course Fee: $10.00

**ART 101 Studio Foundation**

3 semester credits

Introduction to studio process and concepts of two and three dimensional media processes. Course Fee: $15.00

**ART 115 Ceramics**

3 semester credits

Elementary studio practice involving hand building and wheel techniques of forming functional and nonfunctional stoneware. Course Fee: $20.00
ART 120 Drawing I
3 semester credits
Study and supervised practice in observational drawing focusing on accurate representation of observed subject matter.

ART 150 Two-Dimensional Design I
3 semester credits
A lecture/studio course in investigating basic design elements: line, shape, texture, and value. The elements considered in the context of compositional principles. Course Fee: $15.00

ART 151 Two-Dimensional Design II
3 semester credits
A lecture/studio course investigating the elements of color: hue, value, and intensity. Color harmony and contrasts studied in compositional context.

ART 204 Printmaking
3 semester credits
An introduction to the fundamental graphic techniques of relief and intaglio printmaking including: woodcut, linocut, dry point, etching, and collograph. Course Fee: $10.00

ART 220 Drawing II
3 semester credits
Studio exercise in observational and imaginative drawing including rendering of the human figure. A variety of expressive techniques and media will be explored. Prerequisite: ART 120.

ART 254 Painting I
3 semester credits
A beginning studio course in still life painting in oil or acrylic. Drawing, color, and design emphasized. Prerequisite: Art 120.

ART 256 Watercolor Painting I
3 semester credits
A beginning studio course in watercolor painting. Research of the medium and observed material toward appropriate use of the transparent medium. Prerequisite: ART 120.

ART/METL 353 Metal Sculpture
3 semester credits
Metal sculpture is a lecture/studio course which is team taught by art and welding faculty. The course examines all phases of the creative process from concept to criticism of the finished form. Both abstract and representational sculpture will be examined with emphasis on welding fabrication. Course Fee: $20.00

ART 361 Art History of Western Civilization I
3 semester credits
A survey of the development of the visual arts of the Western World from Prehistoric through Gothic Art.

ART 362 Art History of Western Civilization II
3 semester credits
A survey of the development of the visual arts of the Western World from the Renaissance through Post-Modernism.

DRAMA

DRMA 123 Introduction to Theatre
3 semester credits
Study of development of theatre and dramatic literature. Reading of plays representative of theatrical styles and genres. Overview of elements of theatrical production.

GDSN 270 Introduction to Photography
3 semester credits
Basic introduction to photography. Use of the camera, film, compositional techniques, and fundamental darkroom procedures. Course Fee: $25.00

MUSIC

MUS 101 Introduction to Music History
3 semester credits
Survey of the fundamental elements of the music of Western civilization. Examination of the history of music and musical styles from the Middle Ages through the Romantic period.

MUS 110 Introduction to Music Theory
3 semester credits
Basic theory providing background in the rudiments of music reading and notation. Includes note and rhythmic reading, scales, intervals and triads. No prior music experience is required.

MUS 210 Voice Ensemble
1 semester credit
Designated for students who wish to further their experience in music by participating in small group or ensemble singing. Repertoire will be based on interests and abilities of the group members. May be repeated up to three times for credit. Prerequisite: consent of the instructor.

MUS 225 Applied Music
1 semester credit
Designed for students who wish to begin or further their experience in vocal or instrumental music. Lessons in piano, voice, or various instruments may be offered privately or in small groups. May be repeated up to three times for credit. Prerequisite: consent of the instructor. Course Fee: $10.00
MUS 301 Music of the Twentieth Century
3 semester credits
A survey of the composers, styles, techniques, trends, and technologies that have shaped the serious music of the 20th century. Prerequisite: MUS 101 or consent of the instructor.

HISTORY (maximum 3 semester credits)

HIST 131 American History I
3 semester credits
A general survey of the fundamental political, social, economic, cultural, and diplomatic developments that have contributed to the formation of American civilization from the colonial period to 1877.

HIST 132 American History II
3 semester credits
A general survey of the fundamental political, social, economic, cultural, and diplomatic developments that have contributed to the formation of American civilization from 1877 to the present.

HIST 141 History of Civilization I
3 semester credits
This course is a survey of the various civilizations of the world from their ancient origins to 1500. European, Asian, American and African societies will be examined, compared and contrasted at the various stages of their development throughout this period. The course deals with the encounters and interactions among the various civilizations, and examines the political, social, economic, cultural, ideological and technological developments that have shaped the world.

HIST 142 History of Civilization II
3 semester credits
This course is a survey of the various world civilizations from 1500 to the present. The civilizations of Europe, Asia, America and Africa will be examined, compared and contrasted at the various stages of their development throughout this period. The course deals with the encounters and interactions among the various civilizations, and examines the political, social, economic, cultural, ideological and technological developments that have shaped the civilizations of the world.

HIST 216 Montana History
3 semester credits
A study of the major political, social, cultural, and economic developments that have contributed to the formation of Montana and to Montana’s place within the region, the nation, and the world, from prehistoric times to the present.

HIST 374 Intellectual History of Western Civilization
3 semester credits
This course offers a survey of the development of ideas from the ancient Hebrew and Greco-Roman cultures through the Middle Ages, Renaissance, Scientific Revolution, and Enlightenment to the Modern Era. Students will read, discuss, and write about primary sources authored by such thinkers as Aristotle, Cicero, Locke, Adam Smith, Burke, Wollstonecraft, Tocqueville, Comte, Darwin, Marx, Spencer, Mill, Nietzsche, Freud, Roccio, and Sartre, and will explore concepts such as Humanism, Liberalism, Positivism, Socialism, Fascism, and Existentialism.

CULTURAL DIVERSITY (maximum of 3 semester credits)

NAS 105 Introduction to Native American Language
3 semester credits
Introduction to one of several Native American languages, concentrating on simple conversations and the relationship of language to culture. The particular language to be studied will vary depending on availability of instruction. Taught by Native speakers, two semesters of NAS 105 (six semester credits) will fulfill the Department of Humanities and Social Sciences language requirement.

NAS 220 Introduction to Ethnic Indian Studies
3 semester credits
Interdisciplinary treatment of Native American studies. Provides general background and understanding of American Indian cultures.

NAS 310 Native Cultures of North America
3 semester credits
Background on the extent and diversity of Native American cultural groups in North America, including languages, geographic locations of cultural groups, and the material, spiritual, and artistic cultures of American Indian tribal groups.

NAS 330 American Indian Oral Tradition
3 semester credits
A study of the oral traditions of various American Indian cultures, including examination of Indian language families, oral history traditions, oral literature, ritual and spiritual observances, together with English translations of Indian memoirs, autobiographies, and religious works.

NAS 331/ENGL 331 Literature by and About Native Americans
3 semester credits
A critical and cultural examination of a representative number of major works written about Native Americans by non-Native Americans and major works by Native Americans. Readings include mythology, poetry, essays, novels, and non-fiction.
**NAS 350 Indian Law**  
3 semester credits  
Treats the present applications and precedents of Federal Indian law and its historical development, including Indian treaties, tribal sovereignty, jurisdictional disputes, tribal and state powers of taxation, economic and environmental controls, and real property interests.

**NAS 364/HIST 364 History of American Indians**  
3 semester credits  
History of American Indians from Pre-Columbian times to the present, with special emphasis on demographic shifts caused by encroaching European and American westward expansion, and relationships between Native Americans and immigrants.

**SOC 315 Race, Gender and Ethnic Relations**  
3 semester credits  
Provide knowledge and understanding of such major minority groups as Native Americans, Chicanos, Puerto Ricans, Cuban Americans, Chinese Americans, Japanese Americans, Jews, and women. Some attention will also be devoted to various nationality groups that suffered severe prejudice and discrimination during earlier decades of American history. Various theoretical and research perspectives pertaining to prejudice and discrimination will be examined.
Appendix C

5-Year Average of “Undecided” Students
### UNDECIDED STUDENTS, 5-YEAR AVERAGE
Based on Fall Semester Data

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150</td>
<td>116</td>
<td>159</td>
<td>177</td>
<td>182</td>
<td>156.80</td>
</tr>
</tbody>
</table>
Appendix D

Retention of “Undecided” Students
## RETENTION OF UNDECIDED STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Fall 1999 to Spring 2000</th>
<th>Spring 2000 to Fall 2000</th>
<th>Fall 2000 to Spring 2001</th>
<th>Spring 2001 to Fall 2001</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 1999 to Spring 2000</td>
<td>77.27%</td>
<td>76.42%</td>
<td>54.40%</td>
<td>43.02%</td>
<td>62.78%</td>
</tr>
</tbody>
</table>
Appendix E

Academic Score Card
The Academic Scorecard

The Academic Scorecard serves as the framework for measuring academic performance—primarily that educational programs are contributing to the overall stability and success of Northern; that they are addressing the educational needs of the region and state; and that they are aligned with the university’s mission and strategic direction. The framework also serves to guide further planning by all academic departments within the university.

<table>
<thead>
<tr>
<th>STUDENTS</th>
<th>QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal:</strong> Increasing the number of students enrolling and graduating from Northern.</td>
<td><strong>Goal:</strong> Increasing the quality of academic programs.</td>
</tr>
<tr>
<td>Measures</td>
<td>Measures</td>
</tr>
<tr>
<td>a. Number of majors and minors (if applicable) in the program for the last five years; a total for each year, and an average for the period—disaggregated by on- and off-campus (or location).</td>
<td>a. Professional or association standards, or other external measures of quality.</td>
</tr>
<tr>
<td>b. Number of graduates from the program for the last five years; a total for each year, and an average for the period—disaggregated by on- and off-campus (or location).</td>
<td>b. Quality of the faculty (e.g., publications, professional conferences or presentations, certifications, awards, service to professional associations, etc.). This measure will vary from program to program because of the broad range of programs offered at MSU-Northern.</td>
</tr>
<tr>
<td>c. Semester-to-semester retention rate, by program, for the last three years, and an average for the period—disaggregated by on- and off-campus (or location).</td>
<td>c. Employer and Advisory Committee satisfaction using survey information.</td>
</tr>
<tr>
<td></td>
<td>d. Student satisfaction using survey information and other appropriate measures (e.g., exit interviews of students upon graduation, focus groups, etc.).</td>
</tr>
</tbody>
</table>

* Denotes a minimum benchmark for all programs to achieve.
<table>
<thead>
<tr>
<th>INNOVATION and UNIQUENESS</th>
<th>PLACEMENT and INDUSTRY DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal: Increasing the ways in which Northern's academic programs are innovative and unique.</td>
<td>Goal: Increasing Northern's responsiveness to industry demands and the rate at which Northern's students are placed in related employment.</td>
</tr>
<tr>
<td><strong>Measures</strong></td>
<td><strong>Benchmarks (Targeted Outcomes)</strong></td>
</tr>
<tr>
<td>a. What is unusual or different about the degree program, when compared to institutions that compete with MSU-Northern?</td>
<td>a. Determined by program</td>
</tr>
<tr>
<td>b. What is innovative about the degree program in the way it delivers its coursework, serves its students, creates career opportunities for students, or develops its curriculum?</td>
<td>b. Determined by program</td>
</tr>
<tr>
<td><strong>RESOURCES</strong></td>
<td><strong>RELATIONSHIP TO MISSION</strong></td>
</tr>
<tr>
<td>Goal: Increasing the efficient and effective use of academic resources.</td>
<td>Goal: Increasing the alignment of academic programs with Northern's Mission and Educational Master Plan.</td>
</tr>
<tr>
<td><strong>Measures</strong></td>
<td><strong>Benchmarks (Targeted Outcomes)</strong></td>
</tr>
<tr>
<td>a. Resources committed to program, using two measures: ratio of program dollars to state allocated dollars; average cost of educating a student in the program; information reported for each of the last three years – disaggregated by on- and off-campus (or location).</td>
<td>a. To be determined</td>
</tr>
<tr>
<td>b. FTES by program for each of the last three years, and an average FTES for the period; student credit hours, by program, for each of the last 3 years, and an average for the period – disaggregated by on- and off-campus (or location).</td>
<td>b. To be determined</td>
</tr>
<tr>
<td>b. How the program meets the core educational values of MSU-Northern (to be completed).</td>
<td></td>
</tr>
<tr>
<td>c. How the program addresses the Key Assumptions and Principles to Guide Educational Planning and Programming at MSU-Northern.</td>
<td></td>
</tr>
</tbody>
</table>