



REACH Program Course Descriptions 2022-2023

Below is a list of courses offered during the 2022-2023 school year through REACH/concurrent enrollment. Any course offered at Minnesota West can be offered as a REACH course. Contact Kent Dahlman (kent.dahlman@mnwest.edu) for more information.

*This list will be updated in August 2023 for the 2023-2024 school year.

AGRI 1101 Introduction to Animal Science 3 credits

Provides students with an introduction to animal science with an emphasis on the fundamental concepts of physiology, nutrition, animal breeding and management as applied to beef cattle, dairy cattle, poultry, sheep and swine production.

AGRI 1102 Principles of Agronomy 3 credits

Explores the principles and practices of plant and related sciences as applied to increasing productivity and improvement of field crops. Emphasis is on crop selection and improvement through the breeding of crop varieties, seeds and seedlings, crop growth and development, crop production hazards, and the harvest and storage of field crops.

AGRI 1110 Introduction to Horticulture 3 credits

Emphasizes the growth process in production of fruits, vegetables, flowers, lawns, trees, and shrubs. Studies include planning, preparation and care of home grounds. Fundamental concepts in plant identification, growth, culture, landscape and design are also studied.

ART 1124 Introduction to Ceramics 3 credits

Creating clay objects using the potter's wheel and hand building techniques. Students also learn to operate a kiln and apply glaze finishes.

BIOL 1110 Principles of Biology 4 credits

Investigates fundamental principles of biology with special emphasis on the composition of living things and living systems, the chemistry of living things, natural selection, cell structure and function, metabolism emphasizing bioenergetics and biosynthesis, the cell cycle, and genetics. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

BIOL 1111 Principles of Biology II 4 credits

Examines biological diversity and the basic mechanisms and concepts in organismal biology including a survey of life forms (viruses, bacteria, protists, fungi, plants and animals.) Additional

topics will include taxonomy, classification, structure and function of the major groups of plants and animals. Prerequisite: BIOL 1110.

BIOL 1115 Human Biology 3 credits

Covers some of the fundamental topics in biology, emphasizing the human. Students will explore the structure and function of healthy human body systems and investigate numerous abnormalities and disease states. Additional topics will include human development, aging, human genetics, DNA technology, genetic engineering, biotechnology, and ecological interactions. Prerequisite: STSK 0090 or evidence of college level reading ability through assessment test or prior college coursework.

BIOL 2201 Human Anatomy 4 credits

Covers structures of the human body from the cellular to organ system level. Includes study of all structures of organ systems. Lecture and lab included. Prerequisite: BIOL 1110 or BIOL 1115 or consent of the instructor.

BIOL 2202 Human Physiology 4 credits

Introduces the functions of the organ systems of the human body. Laboratory experience will include tests and hands on practical lab experiments. Prerequisite: BIOL 2201.

BIOL 2245 Medical Terminology 2 credits

Provides students in any of the health science disciplines or pre-professional studies with working knowledge of the terminology used in the health professions. Prerequisite: STSK 0090 or evidence of college level reading ability through assessment test or prior college coursework.

BUS 1101 Introduction to Business 4 credits

Introduction to Business provides students with vital exposure to the major business functions in a dynamic free enterprise environment. Introduction to Business offers students relevant exposure to background information necessary to execute decision-making in a multitude of business specialties. Fundamentals of business are emphasized in an introduction to such areas as management, marketing, financing and information systems.

BUS 2105 Introduction to Entrepreneurship 2 credits

Presents information on starting a new business, developing a business plan, buying an existing business, and understanding the realities of the entrepreneurial lifestyle. Entrepreneurial issues involved in managing and growing an entrepreneurial venture will be covered in a separate class. This course is intended for all students at Minnesota West regardless of their major.

BUS 2297 Internship 2-8 credits

Offers students paid or unpaid work experience closely related to their academic and career pursuits. Activities are closely supervised by college instructors and on-the-job supervisors.

CHEM 1100 Introduction to Chemistry 3 credits

Covers the metric system, atomic structure, periodic law, formulas, nomenclature, chemical bonding, chemical equations, solutions, acids, bases, and a little nuclear chemistry. This course is designed for students who are not planning to major in the science field. It can be used as a stepping stone to get ready for CHEM 1101.

CHEM 1101 General Inorganic Chemistry I 4 credits

Introduces students to fundamental concepts of chemistry, equations and reactions, stoichiometry, the periodic table and properties, atomic structure, molecular orbitals, hybridization, gas laws, solutions, colloids and active metals. Prerequisite: High school Algebra or MATH 0099, or concurrent enrollment in MATH 0099 and high school Chemistry.

CHEM 1150 Survey of Chemistry 4 credits

Prepares students in pre-health science programs requiring one course of chemistry. The specific intent of the course is to provide the necessary chemistry background for students to proceed into introductory survey courses of such areas as biochemistry, microbiology, and physiology; as well as to furnish a broader and deeper basis for understanding the related techniques and problems in today's society. Selected topics given special emphasis are: state, properties and phase changes, acid-base concepts, use of pH, aqueous equilibria, families of carbon compounds, typical organic reactions, and macromolecules of biological importance.

CMST 1101 Introduction to Speech 3 credits

Focuses on elementary speech training aimed at public speaking, extemporaneous speaking, and impromptu speaking. Course emphasizes delivery techniques, audience analysis, research, organization, clearness of statement, and logical thinking.

CMST 2210 Oral Interpretation 3 credits

Focuses on interpretation of short fiction, poetry, drama, and children's literature for oral presentation. The student will examine selected texts and incorporate body and voice control techniques in performance.

EDUC 1100 Introduction to Education 3 credits

Introduces students to early childhood, elementary and secondary education. Students will have the opportunity to examine their potential for the teaching profession. This course examines career opportunities, requirements, regulations, and professional ethics. The study of historical and social foundations of education, as well as schools in a diverse society will be included in the course. Twenty (20) hours of field experience is included. Prerequisite: Department of Human Services background study will be conducted.

EDUC 1102 Technology: Classroom Applications and Portfolio Development 3

credits Introduces the educational uses of technology by exploring computer applications as tools for their own learning as well as the ethics of electronic communications. A Teacher Education portfolio (online) will be developed. Prerequisite: ENGL 0090 or placement by multiple measures

EMS 1112 AHA CPR Healthcare Provider, AED First Aid Certification 1 credit

Covers the skills necessary for the newest AHA Guidelines for the CPR Healthcare Provider Certification as well as Certification in Automated External Defibrillation and First Aid. The provider will be able to properly and safely assess a patient, as well as how to recognize signs and symptoms and administering the appropriate treatments.

ENGL 1101 Composition I 3 credits

Reviews and reinforces basic essay writing principles. Emphasis is on rhetorical modes of development and writing as process. Assignments include a short research paper. Prerequisite: ENGL 0090 or placement through assessment test or prior college coursework.

ENGL 1102 Composition II 3 credits

Composition II builds on Composition I with emphasize on information literacy, critical thinking, and style development. Composition assignments include a research paper. Prerequisite: English 1101.

ENGL 1105 Introduction to Literature 3 credits

Studies the elements, forms, and content of fiction, drama, and poetry. This course aims to introduce students to various genres of literature, with an emphasis on reading strategies and reading analysis. Assignments include readings, literary reflections, and a research-based literary presentation. Prerequisite: STSK 0095 or placement by multiple measures.

ENGL 2202 Modern American Literature 3 credits

Introduces prominent American writers and influential literary works that have shaped American cultural identity from 1865 through the present. The course takes a broad view of the traditional canon to include writers and works from many areas of America's past. Instructors recommend that students complete ENGL 1105 or an advanced high school literature class before registering for this course.

ENGL 2203 Midwest Literature 3 credits

This course will introduce students to the rich and diverse body of Midwest literature through the exploration of poetry, fiction, nonfiction, and drama. The course will also address various cultural, historical, and geographical matters relating to Midwest literature, and the significance of Midwest literature, both in particular and general terms. Prerequisite: STSK 0095 or placement by multiple measures.

ENGL 2243 Composition: Creative Writing 3 credits

Gives students the tools to write poems and stories. Students will analyze and evaluate published works as well as the works of their peers. The textbook and lectures will provide strategies for writing and editing poems and stories. The class is conducted in an informal, workshop atmosphere. Students will write a final narrative to be published in Minnesota West's creative journal. This course may be taken as an alternative to ENGL 1102. Prerequisite: ENGL 1101

GEOG 1100 Introduction to Geography 3 credits

Introduction to Geography introduces various aspects of Geography. Emphasis will be given to cartography, meteorology, climatic elements, political, and population geography. Place-location is also covered. Prerequisite: STSK 0090 or evidence of college level reading ability through assessment test or prior college coursework.

HC 1120 Introduction to Healthcare Careers 3 credits

Provide students the opportunity to explore a wide variety of career options, provide basic knowledge and skills, and develop an awareness of workplace expectations. Students will

participate in in-depth study and exposure to medical/health science careers, career planning, employability skills, basic terminology, ethics, wellness, disease and safety.

HIST 1101 US History to 1865 4 credits

Presents a survey of United States history from about 1500 to 1865 and encompasses political, economic, social, intellectual and cultural developments. Human diversity in the historical and cultural context of American history is also addressed. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

HIST 1102 US History Since 1865 4 credits

Presents a survey of United States history from about 1865 to the present and encompasses political, economic, social, intellectual and cultural developments. Human diversity in the historical and cultural context of American history is also addressed. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

HIST 1105 Minnesota History 3 credits

Surveys of Minnesota history beginning with the earliest human habitation to the present, including political, economic, social, and cultural developments. Major emphasis is on the nineteenth and twentieth centuries.

HIST 1121 Early World History 3 credits

Includes a global and cross-cultural study of the early period of world history, including ancient civilizations. Empires and regions examined include ancient India, China, Greece, Egypt, Rome, the Americas, Africa, Southeast Asia, Japan, Medieval Europe and include the interactions of these civilizations. The study will include the emergence of the major world religions and their influence in the world cultures and civilizations. (Buddhism, Christianity, Judaism, Islam, and Hinduism). Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

HIST 1122 Modern World History 3 credits

Includes a global and cross-cultural study of the modern period of world history from 1500 to the present. Topics include the influence of European expansionism and colonialism, interaction of nations and peoples, reform and change in religious pattern, and the development and spread of the Industrial revolution, Marxism, Communism, Constitutional monarchies, Representative democracies, global rearrangements or the twentieth century, decline of European colonialism, and contemporary conditions. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

HIST 2202 Modern American Wars 3 credits

History 2202 begins with the history and ethics of the Spanish American War, when the United States turned away from isolationism and toward global interaction. The course then examines the history and ethics of World Wars I and II, the history, causes and peace settlements of each, and the significance of each conflict. The course moves on to the history and ethics of the Cold War era and its associated conflicts, and concludes with an analysis of the history and ethics of American involvement in the Middle East and the War on Terror. Additionally, the course

addresses certain social, political, economic, and intellectual questions from an ethics perspective, including genocide and disease. Emphasis is placed on the viewpoints of each nation involved in conflict and why it chose war instead of peace. This history course may be taken for either Global Perspective or Ethics credit. Prerequisite: STSK 0095 or placement by multiple measures.

HLTH 2240 Basic Nutrition 3 credits

Introduces the study of food and human dietary patterns. Examines sources of nutrients, how they are processed in the body, body composition, current dietary guidelines and nutritional issues, the impact of socio-cultural factors on diet, and the impact of dietary choices on health. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

MATH 1105 Introduction to Probability and Statistics 4 credits

Introduces the measures of central tendency, measures of dispersion, frequency distributions, probability, sampling distributions and the central limit theorem, testing of hypotheses, analysis of variance, linear regression and correlation analysis. Prerequisite: Two years of high school algebra, MATH 0099, or placement by exam.

MATH 1111 College Algebra 3 credits

Reviews the fundamental operations of higher algebra integrated with a functions approach. Studies polynomial, exponential, and logarithmic functions, graphs and transformations, systems of equalities and inequalities, matrices and determinants, problem solving applications and data modeling techniques. Prerequisite: Two years of high school algebra, MATH 0099, or placement by exam.

MATH 1113 Pre-Calculus 4 credits

Reviews the concepts functions of college algebra and then extends those ideas to trigonometry and analytic geometry. Exponential, logarithmic, and polynomial functions are emphasized in the review. The course explores rectangular coordinates and angles, solutions of right triangles, unit circles, radian measure, trigonometric functions and their inverse, trigonometric graphs, trigonometric equations and identities, complex numbers, conic sections, and other analytic geometry topics such as polar coordinates, parametric equations, sums and geometric series, and vectors. Prerequisite: MATH 1111 or placement by exam.

MATH 1121 Calculus I 4 credits

Introduces the basic ideas of differential and integral calculus: topics include limits and continuity, differentiation of functions, applications of derivatives, definite and indefinite integrals, the fundamental theorems of integral calculus, numerical integration, and applications of definite integrals. Prerequisite: Four years of high school mathematics, MATH 1113, or placement by exam.

PHYS 1201 Fundamentals of Physics I 4 credits

Develops a foundation for future studies in fields not requiring the calculus. Laboratory and lecture based instruction using both calculator and computer based instruction. Develops a foundation in physics for liberal arts, premedical, or pre-pharmacy students. Topics studied include one and two-dimensional motion, forces and acceleration, applications of Newton's

Laws, momentum, gravitation, collisions, work and energy, rotational motion, and angular momentum, harmonic motion and sound. Prerequisite: MATH 0099 or higher.

PHYS 1202 Fundamentals of Physics II 4 credits

Covers topics including temperature and heat transfer, laws of thermodynamics and heat engines, electric fields, electricity of direct current circuits, electronics magnetism and radioactivity. Prerequisite: PHYS 1201 or consent of instructor.

PSCI 1201 American Government and Politics 3 credits

Presents a general survey of the history, philosophy, functions and performance of American national political institutions and processes. This course also emphasizes ethical and civic responsibility. Prerequisite: STSK 0090 or evidence of college level reading ability through assessment test or prior college coursework.

PSYC 1101 Introduction to Psychology 4 credits

Provides an overview of contemporary psychology. Topics include the biological bases of behavior, sensation and perception, motivation, learning, memory, development, personality theory and disorders. Emphasis is given to biological, ability, age, gender, personality, and ethnic diversity. This course is a prerequisite for all other psychology courses. Required course for many degree programs. Prerequisite: STSK 0095 or evidence of college level reading ability through assessment test or prior college coursework.

PSYC 2221 Abnormal Psychology 3 credits

Provides students with historical and current views of the major patterns of behavior disorders. Examines the etiology of disorders, their symptom patterns, assessment and classification, their prevention and treatment, and current issues in the mental health field. Attention is given to how social variables such as race/ethnicity, gender, and socioeconomic status affect determination of abnormality. Prerequisite: PSYC 1101 or consent of instructor

SPAN 1101 Spanish I 4 credits

Assists students in developing proficiency in listening, speaking, reading and writing Spanish, mastering fundamental grammatical concepts, and integrating the culture of the Spanishspeaking world. The course is designed for students with little or no prior language study. Prerequisite: STSK 0090 or evidence of college level reading ability through assessment test or prior college coursework.

STSK 1110 Freshman Seminar 1 credit

Enhances the student's adjustment and success with the college experience. The Freshman Seminar course provides first-year students with a general orientation and introduction to resources and skills helpful in the transition to college life and to assist in long term academic and personal success. It is designed to facilitate a successful college experience. Students will develop college-level study skills and will learn about college resources to assist them in their personal and academic adjustment to college life. Strategies for a successful college experience, including: time management, studying smart, taking notes from lecture and textbooks, writing,

test taking techniques, stress management, learning teaching styles, preparing speeches, introduction to online learning, navigating D2L and ITV/distance learning will be covered.

THTR 2122 Introduction to Film 3 credits

Reviews the technical, historical, and dramatic elements of film making. The course is intended to give students a more sophisticated perspective of this unique art form

WELD 1230 Gas Metal Arc Welding I 3 credits

Provides the student with a thorough technical understanding of Gas Metal Arc welding (GMAW), welding safety, equipment and setup, and wire and shielding gas classifications and selection. It also provides training to develop the skills necessary to make quality gas metal arc welds on mild steel.