

Dual Credit Courses and their Prerequisites

The courses listed below are Oregon Tech courses that are articulated for dual credit. All courses are cataloged courses and can be found in our 2024-2025 catalog year.

[Review online catalog](#)

Anthropology

ANTH 102 – Intro to Archaeology

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Survey of the science of archaeology. Covers the biological and social evolution of the human species with emphasis on the growth of human populations and social complexity. Relates site-specific evidence to theories of social change. Discusses field and laboratory methods of archaeology.

ANTH 103 – Intro to Cultural Anthropology

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Culture, language, subsistence patterns, group formation, kinship, economic systems, political organizations, religion, and cultural change.

Business

BA 101Z – Introduction to Business

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Presents an integrated view of both established and entrepreneurial businesses by studying their common characteristics and processes in a global context. Introduces theory and develops basic skills in the areas of accounting, finance, management, and marketing, with an emphasis on social responsibility and ethical practices. Explores how businesses can create value for themselves and society by addressing environmental and social challenges.

BUS 215 – Principles of Management

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Introduction to the history of management. Emphasis on the management functions of planning, organizing, directing and controlling; existing and emerging management theories, social responsibilities and business ethics. (Cannot be taken for graduation credit by students who have taken BUS 304 or BUS 317.)

BUS 223 – Marketing I

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Principles that drive the integration of the marketing mix (product, price, place, promotion) to meet the needs and wants of consumer and business markets. Function of market research and the study of market opportunities to grow and sustain organizations.

Biology

BIO 101 – Intro to Cell Biology

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Introduction to cell biology, genetics, basic chemistry of living organisms, and the scientific method.

BIO 102 – Diversity of Life

Lecture Hours: 3

Lab Hours: 4

Credit Hours: 4

Evolution and phylogenetics among all major groups of living organisms, including bacteria, protists, fungi, plants, and animals.

BIO 103 – Intro to Human Anat & Phys

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Basic human anatomy and physiology, including a survey of all major bodily systems. (cannot be used for graduation credit by students who have taken BIO 231, BIO 202, and BIO 233.)

BIO 109 – Intro to Medical Sciences

Lecture Hours: 1

Lab Hours: 2

Credit Hours: 2

Survey of medical and health-related occupations, including biomedical sciences. Discussion of health care structure, private and public entities, the research community, and trends in health education and practice.

BIO 200 – Medical Terminology

Lecture Hours: 2

Lab Hours: 0

Credit Hours: 2

Basic structure of medical works including prefixes, suffixes, roots and combining forms. Correct spelling, pronunciation, and meaning of terms are stressed.

Chemistry

CHE 101 – Intro to General Chemistry

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

A brief presentation of introductory chemical concepts including atomic structure, the chemical equation, the behavior of gases, the chemistry of solution, and acid-base chemistry. For students with good knowledge of algebra.

Corequisite: CHE 104 (lab)

Pre- or Corequisite: MATH 100

CHE 104 – Intro to General Chemistry Lab

Lecture Hours: 0

Lab Hours: 3

Credit Hours: 1

Lab accompanying class content in CHE 101

CHE 221 – General Chemistry I

Lecture Hours: 4

Lab Hours: 3

Credit Hours: 5

Atomic structure, chemical compounds, chemical equations and reaction stoichiometry, reactions in aqueous solution (including acid/base, redox, and precipitation reactions), gas laws and kinetic-molecular theory, and thermochemistry. Includes lab component.

Prerequisite: CHE 101 and CHE 104 or high school chemistry equivalent

Pre- or Corequisite: MATH 111Z

CHE 222: General Chemistry II

Lecture Hours: 4

Lab Hours: 3

Credit Hours: 5

Electronic structure of atoms, periodic trends, chemical bonding, molecular geometry, intermolecular forces, phase transitions, and properties of solutions. Includes lab component.

Prerequisite: CHE 201 and CHE 204, or CHE 221

Communication

COM 111Z – Public Speaking

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

COMM 111Z emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations.

Computer Systems Engineering Technology

CST 116 – C++ Programming I

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

Computer Concepts and problem-solving methods using C++ programming language. Topics include: algorithms, simple data types, conditional and iterative structures, function definition, structured programming and documentation. Cannot be taken for graduation credit if student has completed MIS 116.

Pre- or Corequisite: MATH 111Z

Cybersecurity

CYB 201 – Cybersecurity Fundamentals

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Introduces the fundamental concepts used in Cybersecurity. Topics covered include: threats, attacks, and vulnerabilities; confidentiality, integrity, and availability; common cybersecurity technologies and tools; security architecture and design principles; identity and access management; risk management; and cryptography.

Economics

ECO 201 – Principles of Microeconomics

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Topics include scarcity, consumer choice, supply and demand, elasticity, cost and pricing theory, theory of market structures (competition, monopoly, monopolistic competition, oligopoly)

Prerequisite: MATH 100 or higher

ECO 202 – Principles of Macroeconomics

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

An introduction to the economic problem. Topics include gross domestic product, unemployment, monetary policy, fiscal policy, macro equilibrium, inflation, and supply and demand.

Prerequisite: MATH 100 or higher

Engineering

ENGR 101 – Intro to Engineering I

Lecture Hours: 1

Lab Hours: 3

Credit Hours: 2

Introduces the student to engineering with a focus on academic success, professional development, ethics, communication, and creative problem-solving techniques, engineering tools (CAD/CAE), and design concepts. A discipline-specific team-based laboratory experience encourages consideration of a chosen engineering discipline.

ENGR 102 – Intro to Engineering II

Lecture Hours: 1

Lab Hours: 3

Credit Hours: 2

The student will focus on their chosen discipline through an interdisciplinary team-based design project including problem identification, measurement, analysis, and presentation to peers. Emphasis will be placed on proper usage of engineering tools and instruments and sound design practices.

ENGR 111 – MMET Orientation

Lecture Hours: 2

Lab Hours: 3

Credit Hours: 3

Topics include: survey of the engineering profession, educational and professional development, standards of practice; engineering information, calculations, and analysis. An engineering design project will be incorporated. This course provides knowledge and skills to engineering student which will benefit their future academic and professional endeavors.

Environmental Science

ENV 111 – Intro to Env Sciences

Lecture Hours: 3

Lab Hours: 3

Credit Hours: 4

A topical overview of environmental sciences stressing the integration of the social, natural, and physical sciences. Emphasis on active learning.

History

HIST 201 – US History

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

The historical development of the United States, Its economic, political, and social institutions from the colonial period to the present. Courses need not be taken in sequence. HIST 201: Pre-Columbian and colonial times to 1840. HIST 202: 1840, Westward expansion and the Civil War to 1899. HIST 203. 1900 to present.

HIST 202 – US History

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

The historical development of the United States, Its economic, political, and social institutions from the colonial period to the present. Courses need not be taken in sequence. HIST 201: Pre-Columbian and colonial times to 1840. HIST 202: 1840, Westward expansion and the Civil War to 1899. HIST 203. 1900 to present.

HIST 203 – US History

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

The historical development of the United States, Its economic, political, and social institutions from the colonial period to the present. Courses need not be taken in sequence. HIST 201: Pre-Columbian and colonial times to 1840. HIST 202: 1840, Westward expansion and the Civil War to 1899. HIST 203. 1900 to present.

Literature

LIT 104 – Intro to Literature

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Literature and the nature of literary experience through reading prose and poetry drawn from American and other Literatures. Works representing principal literary types and read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism.

LIT 105 – Intro to Literature

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 3

Literature and the nature of literary experience through reading prose and poetry drawn from American and other Literatures. Works representing principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism.

Mathematics

MATH 105Z – Math in Society

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology.

MATH 111Z – Precalculus I: Functions

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

A course primarily designed for students preparing for trigonometry or calculus. This course focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, and inverse functions. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology

Prerequisite: [MATH 100](#) with grade “C” or better, or equivalent

MATH 112Z – Precalculus II: Trigonometry

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology.

Prerequisite: [MATH 111Z](#) with grade “C” or better, or equivalent

MATH 251 – Differential Calculus

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Theory, computation techniques and applications of the derivative.

Prerequisite: MATH 112Z with grade “C” or better, or equivalent

MATH 252 – Integral Calculus

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Computational techniques for and applications of the definite and indefinite integrals.

Prerequisite: MATH 251 with grade “C” or better

STAT 243Z – Elementary Statistics I

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

A first course in statistics focusing on the interpretation and communication of statistical concepts. Introduces exploratory data analysis, descriptive statistics, sampling methods and distributions, point and interval estimates, hypothesis tests for means and proportions, and elements of probability and correlation. Technology will be used when appropriate.

Prerequisite: MATH 100 or instructor consent

Physics

PHY 201 – General Physics

Lecture Hours: 3

Lab Hours: 0

Credit Hours: 4

An introduction to physics with study of Newtonian mechanics, including kinematics, dynamics, work, energy, power and hydraulics. All general physics students must register for a laboratory section.

Prerequisite: MATH 112Z with grade “C” or better

Psychology

PSY 201Z – Introduction to Psychology I

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Research Methods, Behavioral Neuroscience, Consciousness, Sensation/Perception, Learning, Memory, Thinking and Intelligence, and related topics.

PSY 202Z – Introduction to Psychology II

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

Introduction to the science and application of psychology. Emphasis will be placed on psychological concepts, theories, and principles related to: Personality, Social Psychology, Health and Well-Being, Motivation and Emotion, Disorders, Therapies, Lifespan Development, and related topics.

Writing

WRI 121Z – Composition I

Lecture Hours: 4

Lab Hours: 0

Credit Hours: 4

WRI 121Z engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry process.

WRI 122Z – Composition II

Lecture Hours; 4

Lab Hours: 0

Credit Hours: 4

WR 122Z builds on concepts and processes emphasized in WR 121Z, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own compositions.

Prerequisite: [WRI 121Z](#) with grade "C" or better

Pre- or Corequisite: [COM 111Z](#)