ANAT 125

HUMAN ANATOMY

CATALOG DESCRIPTION

Study of human body structures including organ, tissue and cellular interrelationships in health and disease. Involves extensive use of models, specimens, histological material, and dissection. Cadaver materials and demonstrations are used.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
AREA B2

IGETC
AREA 5B

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Can apply knowledge/skills in appropriate settings

Although this course is listed as a GE, this course is NOT recommended for non-allied health majors! This course is an in depth study of human cells, tissues and organ systems, focusing on clinical applications for students pursuing a degree in healthcare. This is a very rigorous course designed with allied health students in mind.

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

AP 50

ELEMENTARY HUMAN ANATOMY-PHYSIOLOGY

CATALOG DESCRIPTION

Introduction to the structure and function of the human body; basic terminology, cell biology, and the organ systems. Designed as a preliminary course for allied health students, but open to all students.

☑ This course is offered online.

MJC GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication,
- Can evaluate, analyze, and synthesize information from many sources

This course explores the fundamentals of the anatomy and physiology of the human body. It is a great class for students who are interested in an elementary understanding of the structure and workings of the human body. There is no lab associated with this class and therefore, unlike most biological science courses, it is offered both as a hybrid class and online only.

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

ASTRO 160

INTRODUCTION TO MODERN ASTRONOMY

CATALOG DESCRIPTION

Introductory survey course in astronomy. Emphasis on current studies of the solar system, the study of extrasolar planetary systems, the birth and death of stars, and cosmology.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5C

OTHER
CC: ASTRO 40

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving,
- an evaluate, analyze, and synthesize information from many sources

This course applies the scientific method to critically examine the differences between scientific and pseudoscientific assertions. Astronomy is a historical science that intersects with classic literature, mythologies of ancient cultures, and the development of mathematics. Students will also learn about current scientific research that can be beneficial for all science and technology majors.

CONTACT

Daniel Chase chased@yosemite.edu x6974

BIO 50

BASIC BIOLOGY

CATALOG DESCRIPTION

Introduction to the study of living organisms. Intended as a practical foundation for students interested in a basic knowledge of biological principles, terminology and the scientific process.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

Students will learn how to utilize the scientific method to study the basic biological principles of living organisms. Working both independently and collaboratively in the laboratory, students will learn how to pose a scientific questions, design and conduct experiments, analyze data, and form conclusions. Students will learn how scientific discoveries and theories affect human activities.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

BIO 111

GENERAL BIOLOGY

CATALOG DESCRIPTION

Introduction to principles of life, including reproduction, heredity, development, evolution, historical development of biology, molecular biology, and ecology.

☑ This course is offered online.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B2, B3*

IGETC
Area 5B, 5C*

OTHER
***There is an associated lab**

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

This course will teach students how to utilize the scientific method while exploring the principles of life. Working collaboratively in the laboratory, students pose scientific questions, perform experiments, analyze data, and form conclusions. Students study how scientific discoveries and theories affect human activities.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

BIO 116

BIOLOGY: A HUMAN PERSPECTIVE

CATALOG DESCRIPTION

An introduction to the principles of biology with an emphasis on humans. Topics covered include scientific method, cell structure and function, biochemistry, metabolism, heredity, biotechnology, evolution, anatomy and physiology of the human body, development of aging, disease, and ecology.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
AREA B2, B3*

IGETC
AREA 5B, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

Evaluate the validity of “research”, “data”, and “facts”. Develop skills to analyze data from multiple sources. Gain general knowledge about the, normal and diseased, structures and functions of the human body. Examine the environmental impact of humans. Study the basic principles genetics (and therefore understand heredity, DNA analysis, and genetic testing)

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

BIO 128

SIERRA NEVADA NATURAL HISTORY

CATALOG DESCRIPTION

A study of the Sierra Nevada mountain range: the people, physical features, fungi, plants and animals.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

Students will learn how to utilize the scientific method. Working collaboratively and independently, students will learn how to pose scientific questions, design experiments, collect and analyze data, and form conclusion using the biological features of the Sierra Nevada. Students will learn how scientific discoveries and theories have affected the management of this mountain range.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

BIO 140

INTRODUCTION TO MARINE BIOLOGY

CATALOG DESCRIPTION

Introduction to the natural history of plant and animals living in temperate and tropical marine habitats, including rocky shore, mudflat, sandy beach, salt marsh, coral reef, mangal forest, open ocean, deep ocean, and bay/estuary. Polar and subpolar marine ecosystems will also be introduced.

☑ This course is offered online.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B2, B3*

IGETC
Area 5B, 5C*

OTHER
***There is an associated lab**

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

Students will learn how to utilze the scientific method to investigate the general physical nature, biological characteristics of marine ecosystems. Students will ildentify the dominant organisms of major marine communities and describe their general characteristics. Working independently and collaborative, students will assess the impact of human activities on the marine environment.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

BIO 145

INTRODUCTION TO FRESHWATER BIOLOGY

CATALOG DESCRIPTION

Introduction to the natural history of common organisms of the freshwater environment along with basic ecological principles, which includes: energy flow, nutrient cycling, population dynamics, and community structure.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B2, B3*

IGETC
Area 5B, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

Students will learn how to utilize the scientific method to study the general physical nature, biological characteristics and composition of freshwater ecosystems. Students will learn to Identify the dominant freshwater organisms and describe their general characteristics. Working independently and collaboratively, students will assess the impact of human activities on the freshwater environment.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

CHEM 142

PRE-GENERAL CHEMISTRY

CATALOG DESCRIPTION

Intended to prepare students for General Chemistry with an emphasis on problem solving using unit analysis. Included are topics on measurement, classification of matter, nomenclature, gas laws, chemical reactions, atomic and molecular structure, stoichiometry, aqueous solutions and fundamentals of acids and bases.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1

IGETC
Area 5A

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Critical thinking/problem solving

This course introduces students to chemistry and understanding the behavior and changes of our environment by studying it the atomic and molecular level. Students will strengthen their problem-solving skills and get a different perspective on how scientific theories dictate human behavior. The course is lecture-based only thus allowing the student to focus on the fundamental concepts of chemistry.

CONTACT

Gagandeep Dhaliwal dhaliwalg@mjc.edu x6836

CHEM 143

INTRODUCTORY COLLEGE CHEMISTRY

CATALOG DESCRIPTION

Designed to meet the requirements for allied-health majors and general education. Principles of general, inorganic chemistry with a strong emphasis on problem solving using dimensional analysis. Included are topics on measurement, classification of matter, nomenclature, gas laws, chemical reactions, atomic and molecular structure, stoichiometry, aqueous solutions and fundamentals of acids and bases.

☑ This course is offered online.

MJC GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
***There is an associated lab**

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Professionalism/organization, work independently, prioritize & manage time

The course presents students with the important concepts of chemistry by understanding the behavior of our surroundings by studying them at the atomic and molecular level. This course will strengthen students problem-solving skills in lecture and allow them to apply them in a laboratory setting where experiments will be done.

CONTACT

Gagandeep Dhaliwal dhaliwalg@mjc.edu x6836

CHEM 150 EXPLORING OUR CHEMICAL ENVIRONMENT

CATALOG DESCRIPTION

Chemical perspective of environmental topics including acid rain and global warming. Basic chemical principles are developed in order to understand such items as conventional, nuclear, and alternative energy sources, air and water pollution, fertilizers, pesticides, food preservatives, genetic engineering, and medicines and drugs.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1

IGETC
Area 5A

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Critical thinking/problem solving

This course presents an understanding of our environment through the lens of chemistry. Real world situations are presented and analyzed at the atomic and molecular level therefore explaining the behavior of these situations. This lecture-based course will allow students to critically think about issues that are currently affecting our society from a science perspective.

CONTACT

Gagandeep Dhaliwal dhaliwalg@mjc.edu x6836

COMM 132 INTRODUCTION TO MASS COMMUNICATION

CATALOG DESCRIPTION

Survey of mass communication and the interrelationships of media with society including history, structure and trends in a digital age. Discussion of theories and effects, economics, technology, law and ethics, global media, media literacy, and social issues, including gender and cultural diversity.

☑ This course is offered online.

GE PATTERNS

MJC GE

MJC GE

MJC-GE
Area B, Area A

CSU-GE
Area C1, Area D

IGETC
Area 3A, Area 4

OTHER
C-ID: JOURN 100

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Can evaluate, analyze, and synthesize information from many sources
- Global/Intercultural Fluency

Students will increase awareness of the various ways culture and ethnicity affect identify and society through depiction in mass media. This awareness will help students analyze the ways individuals act and have acted in response to our global environment. This course can benefit students of all majors as they become more aware of the use of media in their discipline.

CONTACT

Todd Guy guyt@yosemite.edu X6177

ELTEC 208

FUNDAMENTALS OF ELECTRICITY AND ELECTRONICS

CATALOG DESCRIPTION

An overview of electrical and electronic phenomena as applied to common consumer and industrial devices. The course examines the physical nature and laws of electricity and magnetism and the application of the scientific method. DC and AC circuits and their characteristics are examined, predicted, and measured. Electronic test equipment and voltage sources are utilized in the construction, troubleshooting and testing of electrical and electronic circuits. This course is approved by the State of California for the Department of Apprenticeship Standards (DAS) Electricians Training Program.

☑ This course is offered online.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can apply knowledge/skills in appropriate settings

ELTEC 208 covers the basics and science of electricity and electronics. It is for all majors, both CTE and non-CTE, as an MJC science requirement and as a gateway to our Electrical programs. A solid foundation in basic math is recommended. Industrial Electronics graduates work with factory automation, sensors, controls, wiring, and other electrical equipment as highly-paid, high-demand employees.

CONTACT

Jim Howen howenj@mjc.edu X6896

FDNTR 219

INTRODUCTION TO NUTRITION SCIENCE

CATALOG DESCRIPTION

Scientific concepts of nutrition related to the function of nutrients in basic life processes; relationship of nutrition to optimum health, dietary changes, and disease.

GE PATTERNS

MJC-GE
Area A, E

CSU-GE
Area E

IGETC
NONE

OTHER
C-ID NUTR 110

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Ethical Judgement and decision-making
- Self-Motivated/proactive problem solving

This course will teach students basic knowledge of nutrient digestion, absorption and metabolism including the relationship between nutrition, health, fitness, and disease. This course can benefit students of all majors in making healthy decisions over a lifetime.

CONTACT

Benjamin Riley rileyb@mjc.edu x6387

MICRO 101

MICROBIOLOGY

CATALOG DESCRIPTION

Includes the study of microorganisms, microbial metabolism, genetics, and varieties; immunity, infections, and antimicrobials.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B2

IGETC
AREA 5B

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication
- Critical thinking/problem solving

The course description includes, "Intended mainly for student entering the health professions." Although this course is listed as a GE, this course is NOT recommended for non-allied health majors! This course is clinical approach to microbes, focusing on clinical applications for students pursuing a degree in healthcare. This is a very rigorous course designed with allied health students in mind.

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

MICRO 111

PLAGUES OF HUMANKIND

CATALOG DESCRIPTION

An overview of various diseases that have plagued humanity over history. Designed for non-majors with an interest in science and public health.

☑ This course is offered online.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication
- Critical thinking/problem solving

Great for folks majoring in history, social sciences, behavioral sciences, health education, etc. Explores pathogens, how they are transferred, and how they affect individuals, communities, and the world. Also explores disease movement between humans and other species.

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

MICRO 111

PLAGUES OF HUMANKIND

CATALOG DESCRIPTION

An overview of various diseases that have plagued humanity over history. Designed for non-majors with an interest in science and public health.

☑ This course is offered online.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning,
- Can evaluate, analyze, and synthesize information from many sources

Students will learn how to utilize the scientific method to evaluate factors that lead to outbreak of disease. Students will research, evaluate, and analyze historical data to describe how disease events in history have changed outcomes in times of conflict and describe how scientific discoveries and theories have affected how societies have dealt with outbreaks of disease .

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

PHSCI 52

THE WAY THINGS WORK

CATALOG DESCRIPTION

Basic physical principles underlying common devices such as cameras, electrical systems, home appliances, and automobiles. General understanding of basic scientific and mechanical principles in order to analyze a wide range of other common devices.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can apply knowledge/skills in appropriate settings

This course will allow students to state and apply basic physical principles in order to explain how various technologies work. Students will acquire knowledge how common devices such as cameras and air conditioners work. This course will help students understand core scientific principles which are important in many applied programs.

CONTACT

Daniel Chase chased@yosemite.edu x6974

PHSCI 180

CONCEPTUAL PHYSICAL SCIENCE: A HANDS-ON APPROACH

CATALOG DESCRIPTION

A survey course of selected topics in physics and chemistry to include the scientific method and measurement; kinematics and dynamics of linear motion; work and energy; structure, classification and properties of matter; chemical change; thermal energy; wave theory; light and optics; electricity and magnetism. Physical theory is explained on a conceptual level with emphasis placed on applying physical principles to everyday phenomena. To include a weekly laboratory/activity session designed to provide students with practical experience in applying physical concepts. Designed for elementary education majors, but open to all students.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
CC: CHEM 30 or PHYCS 30,
C-ID: CHEM 140 PHYS 140

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Ability to work with data, numbers and statistics

This course applies the scientific method in order to explain, analyze and solve problems related to physical phenomena. Students will explore physical concepts in a collaborative laboratory setting. This course is designed for elementary education majors, but is valuable for all students wanting to pursue a scientific or educational degree.

CONTACT

Daniel Chase chased@yosemite.edu x6974

PHYS 180 CONCEPTUAL PHYSICS: A HANDS-ON APPROACH

CATALOG DESCRIPTION

A survey course of selected topics in physical inquiry to include motion, waves, heat, energy, electricity, magnetism and modern physics. Physical theory is explored on a conceptual level with emphasis placed on applying physical principles to everyday phenomena. To include a weekly activity/laboratory session designed to provide students with practical experience in applying physical concepts.

☑ This course is offered online.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Ability to work with data, numbers and statistics

This course applies the scientific method in order to explain, analyze and solve problems related to physical phenomena. Students will explore physical concepts in a collaborative laboratory setting. Students will demonstrate the proper use of laboratory instruments in making measurements. This course is useful for students who need a conceptual understanding a basic physical principles.

CONTACT

Daniel Chase chased@yosemite.edu x6974

PHYSO 101

INTRODUCTION HUMAN PHYSIOLOGY

CATALOG DESCRIPTION

Study of physiological principles, function, and homeostasis of the human body in health and disease; at the biochemical, cellular, tissue, organ, and system levels: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, urinary, digestive, and reproductive. Includes cellular communication, sensory reception, and neural and hormonal control: body movement, oxygen and nutrient delivery, immunity, fluid and electrolyte balance, metabolism and reproductive function.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
AREA B2

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Can apply knowledge/skills in appropriate settings

This course is intended primarily for Nursing, Allied Health, Kinesiology, and other health related majors. Although this course is listed as a GE, it is NOT recommended for non-healthcare majors! This course is a rigorous, in-depth study of human physiology, from the molecular level to the organism level, focusing on clinical applications for students pursuing a degree in healthcare.

CONTACT

Holly Nash-Rule nashruleh@mjc.edu x6290

PSYCH 103

INTRODUCTION TO NEUROSCIENCE

CATALOG DESCRIPTION

This course introduces the scientific study of the biological bases of behavior and its fundamental role in the neurosciences. Physiological, hormonal, and neurochemical mechanisms, and brain-behavior relationships underlying the psychological phenomena of sensation, perception, regulatory processes, emotion, learning, memory, and psychological disorders will be addressed. The course also notes historical scientific contributions and current research principles for studying brain-behavior relationships and mental processes. Ethical standards for human and animal research are discussed in the context of both invasive and non-invasive experimental research.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B2

IGETC
Area 5B

OTHER
C-ID: PSY 150

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can evaluate, analyze, and synthesize information from many sources

This course introduces students to the interdisciplinary field of neuroscience: the study of the brain and nervous system. Students will learn about a wide range of research topics and methods aimed at understanding basic nervous system function and causes of brain and nervous system diseases. Students will evaluate methods from multiple disciplines to understand complex brain-behavior problems.

CONTACT

Shelly Fichtenkort fichtenkorts@mjc.edu x6898

ZOOL 101

GENERAL ZOOLOGY

CATALOG DESCRIPTION

Survey of major animal and protozoan phyla with emphasis on evolutionary relationships, structural and physiological adaptations and ecological importance

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B2, B3*

IGETC
Area 5B, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Ability to work collaboratively in teams

This course teaches students how to utilize the scientific method to understand the principles of animal life and the current method of classification. Working collaboratively in the laboratory, students will learn to pose scientific questions, perform experiments, collect data, and form conclusions. Students will learn how scientific discoveries and theories affect human activities.

CONTACT

Catherine Tripp trippc@yosemite.edu x6783

GEOG 101

PHYSICAL GEOGRPAHY

CATALOG DESCRIPTION

Spatial study of the Earth's dynamic physical systems and processes. Examination of Earth-sun relationships including weather, climate, vegetation, soils, landforms, and tectonics. Emphasis upon interrelationships between humans and the environment, resulting patterns and distributions.

☑ This course is offered online.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1

IGETC
Area 5A

OTHER
CID GEOG 110

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/analytical reasoning
- Can apply knowledge/skills in appropriate settings

This course centers upon earth processes and their global locations. Students learn about solar radiation patterns, weather processes, wind, plate tectonics, soils, vegetation, and landforms created by glaciation, rivers, wind, and tides. Students evaluate how humans adapt or modify the earth. Students will suggest sustainable use of the environment.

CONTACT

Cece Hudelson hudelsonc@yosemite.edu x6104

EASCI 161

EARTH SCIENCE

CATALOG DESCRIPTION

An introductory study of the several branches of earth science: geology, oceanography, meteorology, and astronomy. Topics include the scientific method, natural resources, minerals, rocks, volcanism, plate tectonics, earthquakes, weathering, erosion, geological time, fresh water, ocean water, ocean currents, the ocean floor, atmosphere, clouds, storms, climate, the sun, the moon, the solar system, stars, interstellar matter, and the formation of the universe.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
C-ID: GEOL 121, CSET 102(?)

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication
- Ability to work collaboratively in teams

Students work together in collaborative teams to design and carry out scientific experiments that answer questions and solve problems.Students write executive summaries that effectively describe recent scientific events, research, or discoveries and their relevance to humanity.

CONTACT

Noah Hughes hughesn@yosemite.edu x6800

EASCI 162

INTRODUCTION TO OCEANOGRAPHY

CATALOG DESCRIPTION

An introductory study of oceanography, the study of the world's oceans. Topics include the ocean's role in the earth system, marine geography, ocean basins and plate tectonics, ocean water, ocean chemistry, marine sediments, ocean-atmosphere interaction, ocean currents, ocean waves and tides, coastal processes, marine ecosystems, ocean life, ocean and climate, oceanographic techniques, and ocean stewardship. Lab activities emphasize gathering and analysis of oceanographic data to understand and predict oceanographic phenomena.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication
- Ability to work collaboratively in teams

Students work together in collaborative teams to design and carry out scientific experiments that answer questions and solve problems.Students write executive summaries that effectively describe recent scientific events, research, or discoveries and their relevance to humanity.

CONTACT

Noah Hughes hughesn@yosemite.edu x6800

METEO 161

INTRODUCTION TO METEOROLOGY

CATALOG DESCRIPTION

Introduction to atmospheric structure, weather monitoring techniques, solar radiation, thermodynamics, air pressure, humidity, cloud formation, wind patterns, planetary circulation patterns, storms and severe weather (including thunderstorms, tornadoes, and hurricanes), and the causes and consequences of climate and climate change. Lab activities emphasize gathering and analysis of meteorological data (both archived and real-time) to understand and predict weather events. Field trips might be required. Not repeatable

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective written communication
- Ability to work collaboratively in teams

Students work together in collaborative teams to design and carry out scientific experiments that answer questions and solve problems.Students write executive summaries that effectively describe recent scientific events, research, or discoveries and their relevance to humanity.

CONTACT

Noah Hughes hughesn@yosemite.edu x6800

GEOL 161

PHYSICAL GEOLOGY

CATALOG DESCRIPTION

Study of the physical and chemical processes that shape the earth, including plate tectonics, volcanism, weathering, and erosion; the composition of the earth; and geologic hazards such as mass wasting, flooding and earthquakes. Laboratory topics include rock and mineral identification, and the use of maps and aerial photographs to understand erosional and tectonic processes.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
C-ID GEOL 101

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can apply knowledge/skills in appropriate settings

Students work together in collaborative teams to collect and analyze geological information and apply it specific issues that affect society, such as natural hazards and natural resources.

CONTACT

Garry Hayes hayesg@yosemite.edu x6294

GEOL 165

GEOLOGY OF CALIFORNIA

CATALOG DESCRIPTION

Study of the physical and chemical processes that shape the earth, including plate tectonics, volcanism, weathering, and erosion; the composition of the earth; and geologic hazards such as mass wasting, flooding and earthquakes. Laboratory topics include rock and mineral identification, and the use of maps and aerial photographs to understand erosional and tectonic processes.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1

IGETC
Area 5A

OTHER
C-ID GEOL 200

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can apply knowledge/skills in appropriate settings

Students work to collect and analyze geological information and apply it to the geological history, natural hazards, and natural resources of California.

CONTACT

Garry Hayes hayesg@yosemite.edu x6294

GEOL 166

HISTORICAL GEOLOGY

CATALOG DESCRIPTION

Introduction to the origin, development, and evolution of the earth and its inhabitants. Topics include the study of fossils and rocks, continents and ocean basins, geologic time, plate tectonics, climate change and mass extinctions. Laboratory utilizes rocks, fossils and stratigraphic principles to decipher ancient environments.

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
C-ID GEOL 111

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Critical thinking/problem solving
- Can apply knowledge/skills in appropriate settings

Students work together in collaborative teams to collect and analyze geological information and apply it to decipher ancient environments on Earth.

CONTACT

Garry Hayes hayesg@yosemite.edu x6294

ANSC 200

INTRODUCTION TO ANIMAL SCIENCE

CATALOG DESCRIPTION

A scientific approach to the livestock industry encompassing aspects of animal anatomy, physiology, nutrition, genetics and epidemiology. Emphasis on the origin, characteristics, adaptations and contributions of livestock to the modern agriculture industry

MJC GE

GE PATTERNS

MJC-GE
Area A

CSU-GE
Area B2

IGETC
Area 5B

OTHER
CSET AG

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Effective oral communication
- Can apply knowledge/skills in appropriate settings

This class will correlate the contributions of livestock and their impact on modern sciences and their interactions with humans. It will explore genetics, nutrition and adaptions of the Ag industry.

CONTACT

Bill Hobby hobbyb@yosemite.edu x6053

NR 200

SOILS

CATALOG DESCRIPTION

Study of soil derivation, classification and characteristics as related to natural and human systems. Soil as a natural system including chemistry, ecology and geology. Soil use and management including erosion, moisture retention, structure, cultivation and organic matter. Special emphasis placed on the relationship between natural and agronomic soil systems.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B1, B3*

IGETC
Area 5A, 5C*

OTHER
CSET Test for Ag

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Can research, find, and organize information from many sources
- Can evaluate, analyze, and synthesize information from many sources

This class will help a student understand the uses of a variety of soils, their composition and how nutrients effect the essential growth and maintenance of life. Will use scientific approaches to enhance knowledge.

CONTACT

Dale Pollard pollardd@yosemite.edu x6204

PLSC 230

FRUIT SCIENCE

CATALOG DESCRIPTION

Elementary culture of fruit and nut crops including growth and fruiting habits, varieties, characteristics and adaptations; environmental factors influencing local fruit production; pruning and training procedures on local fruit crops.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
NONE

IGETC
NONE

OTHER
NONE

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Can apply knowledge/skills in appropriate settings
- Can evaluate, analyze, and synthesize information from many sources

This course will teach students applicable knowledge to grow sustainable fruits and nuts. They will learn to analyze and synthesize information to apply better food growing practices.

CONTACT

Dale Pollard pollardd@yosemite.edu x6204

PLSC 200

INTRODUCTION TO PLANT SCIENCE

CATALOG DESCRIPTION

Introduction to plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants.

GE PATTERNS

MJC GE

MJC-GE
Area A

CSU-GE
Area B2

IGETC
Area 5B

OTHER
CSET test for Ag

WHAT SKILLS AND COMPETENCIES WILL NON-MAJORS LEARN?

- Can apply knowledge/skills in appropriate settings
- Can evaluate, analyze, and synthesize information from many sources

This plant science class is a general overview of plants, their structure, growth patterns and allows the student to analyze ideal growing environment.

CONTACT

Dale Pollard pollardd@yosemite.edu x6204