

Physical Science

Physical science, the study of the nature and properties of energy and nonliving matter, is an interdisciplinary field that includes astronomy, geology, physics, and chemistry.

Students take physical science courses to explore the discipline, satisfy general education requirements, and meet one of the science requirements for the liberal studies (K-5) teaching major.

Academic and Career Pathway

Math and Sciences (<https://www.miracosta.edu/academics/degree-and-certificate-programs/math-and-sciences/>)

Contact Information

Chairs: Kent

McCorkle(Chemistry), Erika
Peters(Physical Sciences)

Dean: Michael Fino

<https://www.miracosta.edu/academics/degree-and-certificate-programs/math-and-sciences/physical-science/index.html> (<https://www.miracosta.edu/academics/degree-and-certificate-programs/math-and-sciences/physical-science/>)

Department: Chemistry and
Physical Sciences

Office: Building OC4800,
760.757.2121 x6924

Certificates

Certificate of Achievement Sustainability Studies

Sustainability entails lifelong behaviors that ensure societal well-being and survival in the natural world. This certificate prepares students to make sustainability decisions regarding the physical, social, and economic environments in which they live. Students are strongly encouraged to work with a MiraCosta counselor to ensure that this pathway certificate is incorporated into their selected general education pattern.

Program Student Learning Outcome

Upon completion of this program, the student will be able to analyze sustainability issues and evaluate the effect on physical, social, and economic environments.

Course Requirements

Select one course:

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EART 106	Earth and Space Science
GEOG 101	Earth's Dynamic Environment: Introduction to Physical Geography
PHSN 106	Introduction to Physical Science: Physics and Chemistry
Select one combined lecture and lab course or a correlating lecture and lab course.	
BIO 102	Introductory Biology: Ecology and Environmental Biology

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BIO 108 & 108L	Introductory Biology: Ocean Ecology and Sustainability and Introductory Biology: Ocean Ecology and Sustainability Lab
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HORT 115	Soil Science
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Complete the courses below.

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DESN 107	History of Western Architecture-A Sustainable Perspective
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GEOG 108	Environmental Sustainability and Society
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Total Units

12-13

Courses

PHSN 106: Introduction to Physical Science: Physics and Chemistry

Units: 3

Prerequisites: None

Acceptable for Credit: CSU, UC

Lecture 3 hours.

Course Typically Offered: Fall, Spring

This course introduces the non-scientist to the fundamental concepts of physics and chemistry. Physics topics include motion, force, work, energy, gravity, electricity, magnetism, light, and subatomic particles and forces. Chemistry topics include chemical and physical properties of elements and compounds, the periodic table, atomic theory and structure, chemical bonding, and nuclear structure and processes. This course also teaches students how to analyze and solve problems using critical thinking and the scientific method. UC CREDIT LIMITATION: No credit if taken after college course in chemistry or physics.

PHSN 292: Internship Studies

Units: 0.5-14

Prerequisites: None

Corequisite: Complete 54 hours of work per unit, paid or unpaid.

Enrollment Limitation: Instructor, dept chair, and Career Center approval. Fourteen unit maximum in any combination of work experience education and/or internship studies per semester.

Acceptable for Credit: CSU

Course Typically Offered: Fall, Spring, and Summer

This course provides students the opportunity to apply the theories and techniques of their discipline in an internship position in a professional setting under the instruction of a faculty-mentor and site supervisor. It introduces students to aspects of the roles and responsibilities of professionals employed in the field of study. Topics include goal-setting, employability skills development, and examination of the world of work as it relates to the student's career plans. Students must develop new learning objectives and/or work/intern at a new site upon each enrollment.