Interdisciplin Courses Science Courses

Courses

SCI 1100. Science Seminar.
Science Seminar (1-0) This course will prepare entering students to succeed in college and introduce students to careers in engineering and science.
Department: Science - Interdisciplinary
1 Credit Hour
1 Total Contact Hour
0 Lab Hours
1 Lecture Hour
0 Other Hours

SCI 1300. Intro. to Science/Engineering.
Introduction to Science and Engineering (3-0) This course will help the student develop learning, study and group skills, improve math applications skills, and develop critical thinking and basic computer skills and problem solving skills. Basic concepts in engineering and science will be introduced. SCI 1300 is identical to ENGR 1300. Prerequisite: MATH 0310. MATH 0310 may be taken concurrently with SCI 1300.
Department: Science - Interdisciplinary
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

SCI 1301. Inquiry in Math & Science.
Students will learn that inquiry is the process by which science and mathematics are done and reflect how this process can enhance their learning. The empirical results of cognitive science will be used to illustrate the importance of understanding preconceptions, cognitive frameworks, and metacognition. Students will be able to apply this inquiry-based framework to research, scholarship, and learning.
Department: Science - Interdisciplinary
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours

Introduction to Engineering and Physical Sciences (3-3) This course will help students develop critical thinking skills, improve problem solving skills, increase learning, study and group skills, develop basic computer skills, and improve math application skills. Basic concepts in science and engineering will be introduced and explored through projects. The course is designed for pre-science and pre-engineering students who are not yet enrolled in MATH 1508. SCI 1400 is identical to ENGR 1400. Prerequisite: MATH 0311. MATH 0311 may be taken concurrently with SCI 1400.
Department: Science - Interdisciplinary
4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours

Explanatory Power of Science (3-3) Milestones in the development of science, including science in the Ancient and Medieval Worlds, the scientific revolution in the late Renaissance; the emergence of working models in physics, chemistry, and biology in the period of the Enlightenment through the mid-nineteenth century; the changing view of the Earth's history with the emergence of geology as a new science; evolutionary theory and the founding of genetics. Consideration of such topics as the explanatory power of empirical data and their interpretation, science vs. pseudo-science, science and theology. Laboratory exercises in science as a progress of investigation. Laboratory fee required.
Department: Science - Interdisciplinary
4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours
Science in the Modern World (3-3) Further milestones in the development of science in the late nineteenth and twentieth centuries, selected from thermodynamics, relativity and cosmology, the physics of the small, modern genetics and contemporary evolutionary theory, and plate tectonics; consideration of science in its cultural contexts, including such topics as science and technology, the aesthetics of science, models of scientific development, science and ethics, scientific elitism, and images of science in the popular culture. Laboratory exercises elucidating scientific concepts and principles. Prerequisite: SCI 1401. Laboratory fee required.

Department: Science - Interdisciplinary
4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours

SCI 1405. Intro Earth/Life Sciences.
Introduction to Earth and Life Sciences (3-3) Integrated introduction to the earth and life sciences, based on review of fundamental physical and chemical principles. Energetics; thermodynamics; atoms and molecules; origin of the universe, stars and planetary systems; origin and evolution of life; principles of geology and biology. Interdisciplinary treatment, with emphasis on quantitative analysis and composition.

Department: Science - Interdisciplinary
4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours

Ethics, Economics, and Ecology (3-0) Integration of ecological fact and theory with concepts and principles of ethics and economics. Problem solving on environmental issues approached through the case study method. An interdisciplinary course for science, education, philosophy, business, and economics majors. Prerequisite: Department approval.

Department: Science - Interdisciplinary
3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours