

SPECIAL COURSES

Astronomy

ASTR 1301 Astronomy (3)

A descriptive survey of the solar system and galactic topics. Emphasis is on the celestial sphere, the earth's motions, the sun, moon, planets, asteroids, comets, meteors, and meteorites.

Freshman Seminar

UNIV 1101 Freshman Seminar (1)

This course is designed to smooth the advance of students into the university environment. It is focused on key competencies for personal and academic success. The course is required for all freshman students who have entered with 24 or fewer college credits. No prerequisite. F, S

Literacy, Vocabulary and Study Skills

LVSS 0191 Literacy for History (1)

Literacy, vocabulary and study skills to help the student succeed in history courses. An overview of critical vocabulary development, note-taking skills, textbook study strategies and reading comprehension specific to the discipline of history.

LVSS 0192 Literacy for Biology (1)

Literacy, vocabulary and study skills to assist the student in improving success in biology courses. An overview of critical vocabulary development, note-taking skills, textbook study strategies and reading comprehension specific to the discipline of biology.

LVSS 0193 Academic Vocabulary Development (1)

Academic vocabulary development to assist the student in improving success in college courses. Vocabulary study skill development and acquisition of vocabulary needed for understanding and success in all college courses as well as within the academic culture. Study of roots, prefixes and suffixes that assist in the understanding of academic terminology seen in various disciplines throughout the college career.

LVSS 0398 Fundamentals of Literacy I (3)

This course focuses on developing students' abilities to read and write interactively, critically, and strategically to improve reading comprehension of narrative and content area text and to implement study strategies to improve performance in other courses.

LVSS 0399 Fundamentals of Literacy II (3)

This course focuses on developing students' abilities to read and write interactively, critically, and strategically to improve reading comprehension of narrative and content area text and to implement study strategies to improve performance in other courses.

Natural Science

NTSC 4301 Environmental Ethics (3)

A series of discussions and written comments on current, social and bioethical issues such as: Ethics of Medicine, Artificial means of Reproduction, Morality of Abortion, Active Euthanasia, Human Gene Therapy, etc. Environmental issues are extremely complex and they usually relate to philosophical, economical and religious viewpoints. This course tries to encourage you to focus on social and environmental problems in a global context. Prerequisites: One year of natural science with laboratory.

NTSC 4311 History and Philosophy of Science (3)

History and philosophical development of science from Classical Greece to modern times. Prerequisites: one year of natural science with laboratory, one year of mathematics.

Philosophy

PHIL 1304 Introduction to World Religions (3)

Survey of religions of the world, such as Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, and Taoism. This course will explore the core tenets and practices of various religions, both historically and in today's global pluralistic society. Prerequisite: none.

PHIL 2303 Logic (3)

The aim of this course is to use the methods of logic (truth tables, natural deduction proofs) to determine the validity of formal and informal reasoning. Classical two-valued systems of sentential, predicate and relational logic will be studied. Prerequisites: MATH 1332, MATH 2412 or MATH 1324 or permission of the instructor.

Physics

PHYS 1301 College Physics I (3) *

Basic concepts of Newtonian mechanics, fluid mechanics, and thermodynamics using algebra and trigonometry. MATH 2412. Corequisite: PHYS 1101. F

PHYS 1101 College Physics I Laboratory (1)*

Experiments in Newtonian mechanics, fluid mechanics, and thermodynamics. Corequisite: PHYS 1301. F

PHYS 1302 College Physics II (3)*

Basic concepts of oscillatory motion, electricity, magnetism, nature of light, optics, relativity, and quantum theory using algebra and trigonometry. Prerequisites: PHYS 1301/1101. Corequisite: PHYS 1102. S

PHYS 1102 College Physics II Laboratory (1)*

Experiments in oscillatory motion, electricity, magnetism, nature of light, optics, and quantum theory. Corequisite: PHYS 1302. S

PHYS 2325 University Physics I (3) *

Basic concepts of Newtonian mechanics, fluid mechanics, and thermodynamics using calculus. Prerequisite: MATH 2413. Corequisite: PHYS 2125. S

PHYS 2125 University Physics I Laboratory (1)*

Experiments in Newtonian mechanics, fluid mechanics, and thermodynamics. Corequisite: PHYS 2325. S

PHYS 2326 University Physics II (3) *

Basic concepts of oscillatory motion, electricity, magnetism, nature of light, optics, relativity, and quantum theory using calculus. Prerequisite: PHYS 2325/2125. Corequisite: PHYS 2126. F

PHYS 2126 University Physics II Laboratory (1)*

Experiments in oscillatory motion, electricity, magnetism, nature of light, optics, and quantum theory. Corequisite: PHYS 2326. F

PHYS 2389 Special Topics (3)

Monte Carlo Simulation in Nuclear Physics: Students will learn the general Monte Carlo physics simulation techniques applied in the Monte Carlo N-Particle simulation code (MCNP).

PHYS 3310 Introduction to Nuclear Physics (3)

Basic concepts of quantum mechanics, nuclear properties, the forces between nucleons, radioactive decay, alpha, beta, gamma, and neutron radiation. The class will cover techniques for radiation detection and measurement, and radiation shielding. Applications to nuclear reactions, nuclear fission, nuclear fusion. Accelerators, nuclear astrophysics, and particle physics as time permits. Prerequisites: PHYS 2325 and PHYS 2326. F