

Natural Sciences (NSCI)

Courses

NSCI 1110. Reacting to the Past: Natural Sciences Perspectives. Units: 3

Examination of a critical change in the natural sciences through the study of the context and impact of a specific idea, innovation or discovery. Using the Reacting to the Past approach, students play complex role-playing games informed by important historical sources (specific themes and topics may vary). Students will develop skills in information literacy, collaboration, speaking, and writing as they pursue the objectives of their assigned role by convincing classmates of their views. Following the game, debriefing will facilitate deeper understandings of the focus concepts and provide reflection about how learning occurred. These skills are critical foundations of success in any field of study at the University and beyond. Satisfies GE category E.

NSCI 1200. Science, Environmental Sustainability and Social Responsibility. Units: 3

Exploration of scientific ways of thinking in the context of environmental sustainability. How scientific knowledge is created and how it is communicated to those who use it to solve environmental problems and to guide responsible action. Emphasis on acquisition of academic skills that will be transferrable to other courses. Learning to see the world and environmental issues through the lens of scientific and mathematical analysis and reflection on how this lens differs from other lenses. Learning how scientific knowledge is created through collaborative processes among those with diverse perspectives. Appreciation of the scientific literature as a professional conversation that expands our understanding of the environment in which we live. Group projects will apply scientific thinking and other approaches to solving environmental problems affecting our local and global communities. Satisfies GE category E.

NSCI 2020. The Science of Cooking. Units: 3

Application of physical science principles to the preparation of food. Scientific topics include heat transfer, thermodynamics, density, and the chemical transformations of ingredients. Application of scientific methods in measurement, inquiry, recipe analysis and modification, and experimental design. Satisfies GE B1.

NSCI 3010. Introduction to STEM and STEM Research. Units: 2

Quarter Prerequisite: Permission of the instructor
Introduction to resources for upper division transfer students, including the library, financial aid, Office of Student Research, and the Career Center. Presents expectations for and tools to help achieve success for students, including active/collaborative learning, reflective learning, and how to pursue undergraduate research and internships. Formerly offered as NSCI 301, students may not receive credit for both courses.

NSCI 3040. Introduction to Math & Science Pedagogy. Units: 2

Basic concepts in how people learn and how best to apply that to a classroom setting. Topics may include questioning strategies, prior knowledge, conceptual framework, metacognition, group work, and equity. For students working as a teaching assistant in College of Natural Science courses, or those interested in teaching in STEM or healthcare fields.

NSCI 3250. Perspectives on Gender. Units: 3

Semester Prerequisite: junior or senior standing. Quarter Prerequisite: junior or senior standing

This interdisciplinary course uses scientific, humanistic, and social science perspectives to foster an understanding of how gender functions in individual lives, societies, and cultures. (Offered as CAL 3250, SSCI 3250 and NSCI 3250. Students may receive credit for only one of these courses.) Satisfies GE Category B5; DI designation; G designation. Formerly offered as NSCI 325, SSCI 325 and HUM 325.

NSCI 3368. U-RISE Seminar I. Units: 2

Quarter Prerequisite: Admission into the U-RISE program
A selected examination of original research articles in behavioral and biomedical sciences. Students will learn to critically read, critique, and present published scientific findings. Offered as NSCI 3368, PSYC 3368, and SSCI 3368 (students may receive credit for only one of these courses). Enrollment is limited to students whose formal application to the Undergraduate Research Training Initiative for Student Enhancement (U-RISE) program is approved.

NSCI 4468. U-RISE Seminar II. Units: 2

Semester Prerequisite: NSCI 3368, PSYC 3368, or SSCI 3368. Quarter Prerequisite: NSCI 368, PSYC 368 or SSCI 368

A selected examination of original research articles in behavioral and biomedical sciences focusing on improving scientific writing skills, shaping long-term research projects, and the development of research funding proposals. Offered as PSYC 4468, NSCI 4468, and SSCI 4468 (students may receive credit for only one of these courses). Enrollment is limited to students whose formal application to the Undergraduate Research Training Initiative for Student Enhancement (U-RISE) program is approved.