Earth, Environmental and Physical Sciences (EEPS)

Courses numbered 100 to 299 = lower-division; 300 to 499 = upper-division; 500 to 799 = undergraduate/graduate.

EEPS 700. Technical Sessions  1 credit hour
Through seminar presentations by students, faculty and guest lectures, students critically analyze essential elements and skills of effective oral presentation of scientific research methodology, data and results to audiences of diverse backgrounds; learn techniques of effective use of visual display media, presentation styles and speaker-audience interactions. Must be taken for two semesters for maximum of 2 credit hours toward the degree. Prerequisite: graduate standing or instructor's consent.

EEPS 701. Computer Methods in Science  3 credit hours
1 Classroom hour; 4 Lab hours. Survey of computer applications commonly used by scientists, emphasizing nonstatistical applications. Includes computer-assisted instruction, data management, presentation packages, Internet resources, digital image analysis, graphics and spreadsheets, reference acquisition and management, desktop publishing, and specialized applications for modeling, simulations, mapping and time-series analysis. Lectures and demonstrations involve individual hands-on activities and student projects. Prerequisite: graduate standing or instructor's consent.

EEPS 702. Research Methods  1 credit hour
Essential elements and principles in scientific research, such as project design, funding, literature research, publication practices and issues of conflict of interest and commitment. Also addresses research misconduct and ethical issues in data acquisition, management, sharing and ownership. May include speakers from the library and research offices. Prerequisite: graduate standing or instructor's consent.

EEPS 710. Great Discoveries and Controversies in Science  3 credit hours
Foundation, history and insights that led to great discoveries in various scientific fields, and which caused great and continuing controversies in scientific theory, the advancement of science, and lessons and perspectives to be learned for future scientific research. Course involves lectures, seminars, literature research, essay writing and presentation by students. Course includes diversity content. Prerequisite: graduate standing or instructor's consent.

EEPS 720. Scientific Writing  1 credit hour
Procedure, organization, format and style of a variety of technical and scientific publication vehicles, such as abstracts, professional journal articles, government and industrial reports and paper and book reviews. Essential elements and skills of effective scientific written communication. Must be taken in conjunction with any course (except EEPS 889 and 890) that requires extensive writing. May be repeated two times for different courses for a maximum of 2 credits toward the degree. Prerequisite: EEPS 700.

EEPS 721. Current Issues in Global Environmental Science  3 credit hours
Introduces and uses basic concepts relating to ecosystems, habitats, environments and resources as a basis for understanding environmental problems at different spatial and temporal scales. An interdisciplinary approach frames these problems to facilitate understanding of interrelationships required for environmental analysis, remediation and management. Course includes diversity content. Prerequisite: EEPS 710 or instructor's consent.

EEPS 760. Whole Earth Geophysics  3 credit hours
Examines the principles of physics as applied to both surface features and the interior configuration of the earth. Studies include an understanding and measurement of the physical properties of magnetism, heat flow, seismicity and gravity. These physical parameters are used to determine the internal structure and to explain the active processes of the earth. Prerequisites: GEOL 111, MATH 243 and PHYS 214 or equivalent, or instructor's consent.

EEPS 781. Cooperative Education  1-6 credit hours
Provides practical field experience, under academic supervision, that complements and enhances the student's academic program. Graded Cr/NCr. Prerequisite: departmental consent.