863 Earth Science for Teachers

Summer. 2 credits. P:NM: Secondary certification in chemistry or physics or earth science or physical science, 3 years teaching experience. R: Approval of college.

Intensive lecture and laboratory study of basic earth sciences from a modern viewpoint.

Interdisciplinary Seminar in Physical 864

Summer. 2 credits. P:NM: (NSC 860) R: Approval of college.

Interrelationships of the physical sciences. The role of society in regulation of science to technology transfer

870

Teaching College ScienceSpring. 2 credits. R: One year of graduate study in a biological or physical science. Approval of college.

Philosophies of education. Ethnic, gender, and cultural issues. Designing a laboratory course. Problems of class size. Instructional technologies. Assessment and evaluation.

889 Research for Inservice Teachers

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to inservice K-12 teachers with baccaulaureate degrees.

Research in faculty laboratories. Oral and written presentations.

899

Master's Thesis Research Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 10 credits in all enrollments for this course, R: Open only to master's students in the College of Natural Science. Approval of college.

Master's thesis research.

Frontiers in Biological Science

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Secondary certif ication in chemistry or physics or earth science or physical science or biology, 3 years teaching experience. Approval of college.

Weekend workshops with research faculty exploring background and latest findings in their area of research

902 Frontiers in Physical Science

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to students with secondary teacher certification in chemistry or physics or earth science or physical science or biology and 3 years of teaching experience. Approval of college.

Weekend workshops with research faculty exploring background and latest findings in their area of re-

NEUROLOGY AND OPHTHALMOLOGY NOP

Department of Neurology and Ophthalmology **College of Human Medicine** College of Osteopathic Medicine

Medical Neuroscience

4(3-2) Interdepartmental with Physiology; Radiology; Human Anatomy. R: Graduate-professional students in colleges of Human Medicine and Osteopathic Medicine. SA: ANT 552

Correlation of normal structure and function of the human nervous system with clinical testing, classical lesions, and common diseases.

Special Topics in Clinical Neuroscience Fall, Spring, Summer. 1 to 3 credits. A stu-

dent may earn a maximum of 12 credits in all enrollments for this course.

Work under the direction of a faculty member on an experimental, theoretical or applied problem in clinical neuroscience or neurology.

Neurology Clerkship

Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:NM: (MED 608) R: Open only to graduateprofessional students in College of Human Medicine. SA: MED 617

Office and inpatient experience. Evaluation and management of neurological disease.

Directed Studies 620

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open only to juniors or seniors in the College of Osteopathic Medicine. Completion of Semester 6 in the graduate-professional pro-

Study in general or specialty neurology and ophthalmology.

Neurology Clerkship

Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Osteopathic Medicine upon completion of Units I and II. SA: PMR 656

Clinical exposure in neurology. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management,

204 Molecular and Developmental

Neurobiology
Fall. 3(3-0) Interdepartmental with Pharmacology and Toxicology; Psychology; Pathology; Zoology. RB: Bachelor's degree in a Biological Science or Psychology. R: Open only to graduate students in the Neuroscience major

Nervous system specific gene transcription and translation. Maturation, degeneration, plasticity and repair in the nervous system.

Advanced Neuroscience Techniques

Laboratory
Summer. 3(0-9) Interdepartmental with Psychology; Pharmacology and Toxicology; Radiology; Physical Medicine and Rehabilitation. P:M: (NEU 804 or concurrently) P:NM: (PHM 827 and ANT 839 and PSY 811) R: Open only to doctoral students in the Neuroscience major.

Methods of neuroscience research and the underlying principles on which these methods are based.

Advanced Behavioral Neuroscience Spring. 3(3-0) Interdepartmental with Psychology. Administered by Department of Psychology. P:NM: (PSY 411) approval of department. R: Open only to graduate students in the Psychology and Neuroscience maior.

Biological mechanisms involved in learning and memory, motivated behaviors, biological rhythms, and psychopathologies.

Physiology and Pharmacology of Excitable Cells

Fall. 4(4-0) Interdepartmental with Pharmacology and Toxicology; Physiology; Zoology. Administered by Department of Pharmacology and Toxicology. RB: (PSL 431 or PSL 432 or BMB 401 or BMB 461 or ZOL 402)

Function of neurons and muscle at the cellular level: membrane biophysics and potentials, synaptic transmission, sensory nervous system function.

Independent Study in Neuroscience

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: Bachelor's degree in neuroscience, biology, psychology, or related area.

Supervised student research on a specialized research topic in basic or clinical neuroscience.

Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course.

Doctoral dissertation research.

NEUROSCIENCE NEU

College of Natural Science

Neuroscience Research Forum

Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 8 credits in all enrollments for this course. RB: Bachelor's degree in neuroscience, biological or psychological science, or related area.

Readings, presentations, and discussions of esearch literature in neuroscience. Professional development.

NURSING

NUR

College of Nursing

Introduction to Nursing Practice I

Fall. 3(2-3) R: Open only to students in the College of Nursing except students in PreNursing and Registered Nurses.

Theoretical concepts of nursing necessary for professional practice. Assessment, interpersonal communication, documentation and decision-making.