

Neurology and Ophthalmology—NOP

- 835 Topics and Methods in Neuroepidemiology**
Summer of even years. 3(3-0) Interdepartmental with Epidemiology. Administered by Department of Epidemiology. RB: (EPI 810)
Epidemiology of neurologic conditions and discussion of the inherent difficulty in studying these disorders.

NEUROSCIENCE NEU

Program in Neuroscience College of Natural Science

- 800 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 research literature in neuroscience. Professional development.
- 804 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.
- 806 Advanced Neuroscience Techniques Laboratory**
Spring. 3(0-9) Interdepartmental with Psychology; Pharmacology and Toxicology; Radiology; Physical Medicine and Rehabilitation. RB: (PHM 827) R: Open only to doctoral students in the Neuroscience major.
Methods and underlying principles of neuroscience research.
- 811 Advanced Behavioral Neuroscience**
Spring. 3(3-0) Interdepartmental with Psychology. Administered by Department of Psychology. RB: (PSY 411) approval of department. R: Open only to graduate students in the Psychology and Neuroscience major.
Biological mechanisms involved in learning and memory, motivated behaviors, biological rhythms, and psychopathologies.
- 820 Advanced Neuroanatomy**
Summer of odd years. 1 to 5 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Human Anatomy. R: Approval of department.
Current topics in anatomy and physiology processes of central nervous system cells.

- 827 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.

- 839 Systems Neuroscience**
Spring. 4(4-0) Interdepartmental with Human Anatomy; Pharmacology and Toxicology; Physiology; Psychology; Zoology. R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Agriculture and Natural Resources, Natural Science, Social Science, and Veterinary Medicine. SA: ANT 839
Anatomy, pharmacology, and physiology of multicellular neural systems. Sensory, motor, autonomic, and chemo-regulatory systems in vertebrate brains.

- 885 Vertebrate Neural Systems**
Spring of odd years. 3(2-2) Interdepartmental with Human Anatomy; Physiology. SA: ANT 885
Comparative analysis of major component systems of vertebrate brains. Evolution, ontogeny, structure, and function in fish, amphibians, reptiles, birds and mammals.

- 890 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.

- 899 Master's Thesis Research**
Fall, Spring, Summer. 1 to 36 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
Master's thesis research.

- 992 Advanced Topics in Neuroscience**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: (NEU 804 and NEU 811 and NEU 827 and ANT 839) Bachelor's degree in neuroscience, biology, psychology or related area.
Readings, presentations and discussion of specialized topics in neuroscience.

- 999 Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 120 credits in all enrollments for this course.
Doctoral dissertation research.

NURSING

NUR

College of Nursing

- 110 Exploring Nursing**
Fall, Spring. 2(2-0)
Introduction to the bio-psycho-social conceptual model of persons in relation to nursing and health. Core concepts and theoretical foundations that frame the art and science of nursing. Development of the profession from inception into contemporary practice and its relationship to the U.S. healthcare system.
- 202 Introduction to Nursing Practice I**
Fall. 2(1-3) 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.
- 204 Introduction to Nursing Practice II**
Spring. 4(2-6) P: (NUR 202 and PHM 350 or concurrently) C: PHM 350 concurrently.
Nursing practice concepts in simulated and clinical practice settings. Development of nursing practice psychomotor skills.
- 215 Core Competencies in Nursing I**
Fall, Spring. 1(1-0) R: Open only to students in the College of Nursing.
Assessment core nursing competencies applying natural, social and nursing science.
- 300 Pathophysiology**
Fall, Spring. 4(4-0) P: (ANTR 350 and PSL 250) Not open to students with credit in NUR 341.
Abnormal physiological health transitions over the lifespan. Disorders affecting cells, organs, and systems involved in the regulation of structure and function within the human organism. How diseases affect the structures, functions, and systems of the human organism. Influence of genetics, ethnicity, environment, and age.
- 303 Concepts of Nursing Care of the Adult**
Fall, Spring. 4(4-0) P: (NUR 204 and NUR 341) C: NUR 304 concurrently.
Family centered nursing care for adults at various levels of health and illness. Prototype health states with emphasis on associated nursing diagnosis and professional standards of care.
- 304 Practicum in Nursing Care of the Adult**
Fall, Spring. 4(0-12) P: (NUR 204 and NUR 341) C: NUR 303 concurrently.
Nursing care of the adult client with an emphasis on health promotion, disease prevention, care in acute and chronic illness, and rehabilitation.
- 305 Concepts of Nursing Care of the Childbearing Family**
Fall, Spring. 2(2-0) P: (NUR 204 and NUR 341) C: NUR 306 concurrently.
Concepts of holistic nursing care with culturally diverse childbearing families during the prenatal, intrapartum, and postpartum periods. Concepts of health promotion and risk factors in client care situations.