

PHYSIOLOGY (PHSL)

Courses

PHSL 503. Biochemical Foundations of Physiology. 4 Units.

Engenders an appreciation of the molecular processes as a foundation for adequate understanding of physiology. Reviews biomolecules, enzymology, and metabolism. Introduces regulatory motifs, genetic principles, and expression of genetic information by employing examples relevant to dentistry.

PHSL 504. Physiological Systems of the Human Body. 5 Units.

Physiological bases of normal function. Lectures and laboratory demonstrations illustrating the physiological principles and systems in man.

PHSL 505. Homeostatic Mechanisms of the Human Body. 5 Units.

Physiological basis of homeostatic control mechanisms. Lectures and laboratory demonstrations illustrating how the various systems of the body are controlled.

PHSL 506. Advanced Physiology and Pathophysiology for Nurse Anesthetist I. 5 Units.

Overview of physiology and pathophysiology (cell, neuro, cardiovascular, pulmonary, GI, renal, endocrine, and reproductive systems).

PHSL 507. Advanced Physiology and Pathophysiology for Nurse Anesthetist II. 4 Units.

Part II of physiology and pathophysiology (cell, neuro, cardiovascular, pulmonary, GI, renal, endocrine, and reproductive systems). Prerequisites: PHSL 506.

PHSL 519. Medical Physiology. 7.5 Units.

Physiological basis of normal and selected pathological conditions, modern concepts of homeostasis, and negative feedback control systems.

PHSL 526. Medical Physiology. 7.5 Units.

Supports the organ system curriculum in the first year. Examines the physiological function and regulation of major organ systems, as well as the integration and interaction of these systems with one another. Discussions include cardiovascular, respiratory, gastrointestinal, renal, endocrine, reproductive, and exercise physiology. Presents essential concepts at various levels of organization, ranging from cellular and molecular to tissue and organ system levels. Emphasizes mechanistic and integrative functions that enable adaptation and survival in the face of changing needs and resources—a process accomplished through formal didactic instruction; self-directed learning activities; and laboratory sessions using student volunteers, simulation, and case studies.

PHSL 537. Neuroscience. 4 Units.

Integrated approach to the fundamentals of neuroanatomy and neurophysiology, with applications to clinical neurology.

PHSL 541. Cell and Molecular Biology. 4 Units.

Prerequisite: Organic chemistry and one of the following: biochemistry, molecular biology, or cell biology. Physics desirable. Prerequisite: Organic chemistry and one of the following: biochemistry, molecular biology, or cell biology. Physics desirable.

PHSL 555. Biology of Cancer. 3 Units.

Interdisciplinary approach to study of the causation, characterization, and prevention of cancer. Offered alternate years.

PHSL 560. Bone Physiology. 3 Units.

Studies bone cells and bone as an organ. Lectures and discussions include functions of bone cells, effects of growth factors, hormones and physical forces on bone, growth and repair of bone, osteoporosis, and other clinical conditions involving bone. Reviews current literature.

PHSL 587. Physiology of Reproduction. 2 Units.

Studies the development of the male and female reproductive systems, neural and hormonal control of reproductive function, fetal development, and parturition. Offered alternate years. Prerequisite or concurrent: PHSL 511, PHSL 512 or PHSL 521, PHSL 522.

PHSL 588. Pathophysiology. 4 Units.

Provides graduate students with an integrated understanding of normal human physiology and the most common pathological changes that occur throughout the lifespan. Focuses on using pathophysiological concepts to explain clinical observations and management.

PHSL 595. Readings in Physiology. 1-4 Units.

Assigned reading and conferences on special problems in physiology.

PHSL 694. Special Problems in Physiology. 2-4 Units.

PHSL 697. Research. 1-8 Units.

PHSL 699. Dissertation. 2-4 Units.

PHSL 891. Physiology Elective. 1.5-24 Units.

Offers fourth-year medical students the opportunity to explore various areas of physiology, including research.