UT Health San Antonio
School of Health Professions

DPT Approved Course Descriptions

Updated: 8/28/2019

Human Anatomy & Physiology I with Lab (TCCNS BIOL 2401)

Human Anatomy & Physiology I Lecture (TCCNS BIOL 2301)

An applied systematic study of the structure and function of the human body designed for students considering a career in the health professions. Anatomical terminology and the structure and function of cells, tissues, and the body systems such as integumentary, skeletal, muscular, nervous and sensory organs in covered.

Human Anatomy & Physiology I Lab (TCCNS BIOL 2101)

Structure and function of the human body including anatomical terminology, cells, tissues, integumentary, skeletal, muscular, nervous, and sensory organ systems.

Human Anatomy & Physiology II with Lab (TCCNS BIOL 2402)

Human Anatomy & Physiology II Lecture (TCCNS BIOL 2302)

A continuation of Human Anatomy and Physiology I designed for students considering a career in the health professions. The structure and function of the following body systems are covered: digestive, respiratory, cardiovascular, endocrine, immune, renal, and reproductive.

Human Anatomy & Physiology II Lab (TCCNS BIOL 2102)

Structure and function of the human body including digestive, respiratory, cardiovascular, endocrine, immune, renal, and reproductive systems.

Biology I with Lab (TCCNS BIOL 1406)

Biology I Lecture (TCCNS BIOL 1306)

This course provides the students with a strong foundation in cellular and molecular biology. Topics include biochemistry, energy metabolism, molecular bases of gene regulation and protein functions, cell division and control, and cell signaling. This course is required for all biology majors and is not recommended for non-science majors.

Biology I Lab (TCCNS BIOL 1106)

Fundamental techniques and instruments used in cellular biological research will be taught while emphasizing safety, measurements, and scientific methods. Students will design and implement controlled experiments, identify independent and dependent variables, analyze data, draw conclusions, and communicate results with appropriate tables and graphs in oral presentations and written papers.

Biology II with Lab (TCCNS BIOL 1407), or Upper-Level Biology with Lab

Biology II Lecture (TCCNS BIOL 1307)

This course provides science majors with a foundation in organismal biology, Mendelian and population genetics, evolution and ecology. Topic include: patterns of inheritance, genetics, evolution, speciation, phylogenetics, and behavioral population, community, and ecosystem ecology. This course is required for all biology majors and is not recommended for non-science majors.

Biology II Lab (TCCNS BIOL 1107)

This course introduces the students to the basics of experimental design, scientific method and inquiry, use of statistical analyses and writing research papers. Topics covered include Mendelian and population genetics, natural selection, population ecology, phylogeny, and behavioral ecology.

General Chemistry I with Lab (TCCNS CHEM 1411)

General Chemistry I Lecture (TCCNS CHEM 1311)

Introduction to modern theories of atomic structure and chemical bonding; chemical reactions; stoichiometry; states of matter; solutions; equilibrium; acids and bases; coordination chemistry.

General Chemistry II Lab (TCCNS CHEM 1111)

First of two laboratory courses in general chemistry for science-related majors. Course introduces the students to the basics of experimental measurements, including density, separation techniques, formula determinations, titrations, thermodynamics, gas laws, and descriptive chemistry.

General Chemistry II with Lab (TCCNS CHEM 1412), Organic Chemistry I with Lab (TCCNS CHEM 2423), or Biochemistry with Lab (TCCNS Not Applicable)

General Chemistry II Lecture (TCCNS CHEM 1312)

Theory and applications of oxidation-reductions systems; thermodynamics and kinetics; complex equilibria and solubility product; nuclear chemistry; descriptive inorganic and organic chemistry.

General Chemistry II Lab (TCCNS CHEM 1112)

Introduction to analytical and synthetic methods and to quantitative techniques to both inorganic and organic compounds with emphasis on an investigative approach.

Organic Chemistry I Lecture (TCCNS CHEM 2323)

Introduction to chemistry of compounds of carbon; general principles and their application to various industrial and biological processes.

Organic Chemistry I Lab (TCCNS CHEM 2123)

Operations and techniques of elementary organic chemistry laboratory; preparation, reactions and properties of representative organic compounds.

Biochemistry Lecture (TCCNS Not Applicable)

Introduction to biochemistry: amino acids, protein structure, enzymes, lipids, metabolism, nucleic acid structure, bioenergetics, and carbohydrates.

Biochemistry Lab (TCCNS Not Applicable)

Basic biochemical laboratory techniques: Protein assay, centrifugation, protein purification, chromatography, electrophoresis, western blotting, and enzyme kinetics.

Physics I with Lab (TCCNS PHYS 1401)

Physics I Lecture (TCCNS PHYS 1301)

Provides the fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sounds, physical systems, Newton's Laws of Motion, and gravitation, and other fundamental forces; with emphasis on problem solving.

Physics I Lab (TCCNS PHYS 1101)

Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving.

Physics II with Lab (TCCNS PHYS 1402)

Physics II Lecture (TCCNS PHYS 1302)

Provides the fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, and optics, and modern physics topics; with emphasis on problem solving.

Physics II Lab (TCCNS PHYS 1102)

Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving.

Introductory/General Psychology (TCCNS PSYC 2301)

A survey of the major principles derived from research on human and animal behavior. Topics studied include learning, thinking, motivation, emotion, personality, the senses, perception, and the form and functions of the nervous system.

Developmental Psychology (TCCNS PSYC 2314), or Motor Development (TCCNS Not Applicable)

Developmental Psychology (TCCNS PSYC 2314)

Problems, methods, major theories, and results in the study of the psychological development of the individual from the prenatal period to old age.

Motor Development (TCCNS Not Applicable)

A study of motor, physical, and neuromuscular development across the human life span. Effects of social, cognitive, growth and maturation, and aging factors on motor development will be addressed.

Introduction to Sociology (TCCNS SOCI 1301), Social Psychology (TCCNS PSYC 2319 or SOCI 2326), or Cultural Anthropology (TCCNS ANTH 2351)

Introduction to Sociology (TCCNS SOCI 1301)

Introduction to theoretical perspectives and research pertaining to society and to the relationship between society and the individual. Covers the basic elements of society, such as culture, social structure, social groups, social class, race, gender, social institutions, social processes, and social change.

Social Psychology (TCCNS PSYC 2319 or SOCI 2326)

A survey of the basic theories and research methods in social psychology; the interaction between the individual and society; the process of acquiring a self concept; socialization processes; personal and social adjustment; interaction within the group.

Cultural Anthropology (TCCNS ANTH 2351)

This course introduces the student to a holistic study of culture. The major elements of human social behavior, material culture, and cultural diversity are studied as adaptations to social and environmental change--past and present.

Speech – Public Speaking (TCCNS SPCH 1315)

This course focuses on research, composition, organization, delivery, and analysis of speeches for various purposes and occasions. This course is designed for students who want to improve skills in public speaking. Emphasis is on critical thinking and refining techniques of speaking.

Statistics (TCCNS MATH 1342 or MATH 1442 or PSYC 2317)

A course covering linear and quadratic equations, inequalities, functions and their graphs, logarithms, systems of equations, and applications of mathematics. Special emphasis on statistical concepts including linear and quadratic regression, distributions confidence intervals, & hypothesis testing.