



DPT Required Prerequisite Courses

All prerequisite coursework must have been completed at an accredited college or university with a minimum grade of "C" or better. The courses should match the course content listed in the CSUS courses listed below. Units listed below are semester units.

Human Anatomy with Lab (1 semester)

BIO 22 Introductory Human Anatomy. Introduction to the study of the gross and microscopic structure of the human body using a systemic approach. Lecture three hours; laboratory three hours. Units: 4.0

OR

BIO 25 Human Anatomy and Physiology I. BIO 25/26 series provides an introduction to the structure and function of the major organ systems of the human body. BIO 25 offers basic terminology and concepts pertaining to the disciplines of anatomy and physiology, including structure/function relationships, homeostasis, and organizational levels; and provides an introduction to the structure and function of the muscular and nervous systems. Note: Not open to students who have successfully completed BIO 22 and BIO 131, or an equivalent combination of separate anatomy and physiology courses. Lecture three hours; laboratory three hours. Units: 4.0

AND

BIO 26 Human Anatomy and Physiology II. BIO 25/26 series provides an introduction to the structure and function of the major organ systems of the human body. BIO 26 provides an introduction to the structure and function of the cardiovascular, respiratory, renal and digestive systems, and emphasizes homeostatic control mechanisms. Note: Not open to students who have successfully completed BIO 22 and BIO 131, or an equivalent combination of separate anatomy and physiology courses. Lecture three hours; laboratory three hours. Units: 4.0

Human Physiology Lab (1 semester)

BIO 131 Systemic Physiology. Physiology of organ systems with emphasis on control and integration of system function. Experiments using selected vertebrate animal models are performed in the laboratory to illustrate functional characteristics of organ systems discussed in lecture and to provide direct experience with techniques, recording systems, and methods of data analysis commonly used in physiology and related fields. Lecture three hours; laboratory three hours. Units: 4.0

OR

BIO 25 Human Anatomy and Physiology I. BIO 25/26 series provides an introduction to the structure and function of the major organ systems of the human body. BIO 25 offers basic terminology and concepts pertaining to the disciplines of anatomy and physiology, including structure/function relationships, homeostasis, and organizational levels; and provides an introduction to the structure and function of the muscular and nervous systems. Note: Not open to students who have successfully completed BIO 22 and BIO 131, or an equivalent combination of separate anatomy and physiology courses. Lecture three hours; laboratory three hours. Units: 4.0

AND

BIO 26 Human Anatomy and Physiology II. BIO 25/26 series provides an introduction to the structure and function of the major organ systems of the human body. BIO 26 provides an introduction to the structure and function of the cardiovascular, respiratory, renal and digestive systems, and emphasizes homeostatic control mechanisms. Note: Not open to students who have successfully completed BIO 22 and BIO 131, or an equivalent combination of separate anatomy and physiology courses. Lecture three hours; laboratory three hours. Units: 4.0

Psychology (2 semesters)

PSYC 2 Introductory Psychology. Provides a general overview of theory and research concerning psychological processes at the basic, individual and social levels. Topics will include physiological psychology, comparative psychology, learning, motivation, sensation and perception, developmental psychology, personality, social psychology, maladaptive behavior, individual differences, and selected other topics. Requires three hours of participation as a research subject. Units: 3.0

AND

PSYC 148 Child Psychology. Examination of behavioral and physiological development during the prenatal period, and behavioral, cognitive and social development during infancy and childhood. Theories, methods and empirical research will be studied. Units: 3.0

OR

PSYC 150 Psychological Aspects of Aging. Developmental study of human aging emphasizing psychosocial, psychopathological, biological, intellectual and personality processes from a theoretical and research-oriented perspective. Prerequisite: PSYC 2. Graded: Graded Student. Units: 3.0

OR

PSYC 151 Psychological Aspects of Death and Dying. Examination of the beliefs, attitudes, and behaviors associated with death and dying. Topics covered include children's and adults' concepts of dying and death; causes and types of death; self-destructive behavior; grief and mourning in the dying person and their survivors; euthanasia and other legal and ethical issues; cross-cultural and historical perspectives. Units: 3.0

OR

PSYC 168 Abnormal Psychology. Detailed consideration of behavior disorders and maladaptive behavior: theories of causation, descriptions of the disorders, and strategies of various therapies. Units: 3.0

Statistics (1 semester)

STAT 1 Introduction to Statistics. Descriptive statistics, basic concepts of probability and sampling with the aim of introducing fundamental notions and techniques of statistical inference. Units: 3.0

OR

SWRK 110 Statistics and Research for Social Workers. Descriptive and inferential statistics, sampling, probability distribution, introduction to research methods, relationship of statistics to research methods; illustrations drawn from the field of human services. Units: 3.0

Chemistry with labs (2 semesters or 3 quarters)

CHEM 1A General Chemistry I. Fundamental principles and concepts of chemistry, including stoichiometry; thermochemistry; atomic and molecular structure; solution chemistry, including acid-base chemistry; quantum theory; bonding and intermolecular forces; and chemical kinetics. Fairly mathematical, requiring the ability to perform arithmetic and algebraic computations. Lecture three hours, laboratory three hours, discussion one hour. Units: 5.0

AND

CHEM 1B General Chemistry II. Continuation of the development of fundamental principles of chemistry and application of principles developed in CHEM 1A. The laboratory work emphasizes applications of equilibrium principles, including some qualitative analysis, coordination chemistry and bioinorganic chemistry. Lecture three hours, laboratory six hours. Knowledge of word processing and spreadsheet software is recommended. Units: 5.0

OR

CHEM 6A Introduction to General Chemistry. Structure of atoms, molecules and ions; their interactions including stoichiometry, equilibria, and oxidation-reduction. Does not fulfill the requirements for more advanced study in chemistry and cannot be counted toward a major or minor in chemistry. Lecture three hours, discussion one hour, laboratory three hours. Units: 5.0

AND

CHEM 6B Introduction to Organic and Biological Chemistry. Introduction to structure and properties of the major classes of organic compounds; introduction to nomenclature and to the fundamental concepts of reaction mechanisms and stereochemistry; the chemistry and metabolism of carbohydrates, lipids, proteins (including enzymes); the chemistry of nucleic acids. Does not fulfill the requirement for more advanced study in chemistry and cannot be counted toward a major or minor in chemistry. Lecture three hours; discussion one hour; laboratory three hours. Units: 5.0

Physics with labs (2 semesters or 3 quarters)

PHYS 5A General Physics: Mechanics, Heat, Sound. PHYS 5A-B sequence is a two-semester course in introductory physics in which fundamental concepts are emphasized including some physiological applications. Lecture two hours; discussion one hour; laboratory three hours. Units: 4.0

AND

PHYS 5B General Physics: Light, Electricity and Magnetism, Modern Physics. Lecture two hours; discussion one hour; laboratory three hours. Units: 4.0

Kinesiology (1 semester)

KINS 151 Kinesiology. Anatomical concepts and physical laws as applied to human movement emphasizing the effects of individual and environmental variables. Includes analysis of normal and pathological gait. Lecture two hours; laboratory three hours. Units: 3.0

OR

KINS 151A Biomechanics. Introduction to fundamental mechanical concepts as they apply to human movement. A broad range of human movement will be explored including activities from sport, industrial settings, normal and pathological locomotory skills, and movements involved in manipulating the environment in which we live. Laws of physics, mechanical principles and mathematical concepts will be integrated in studying man as a biological entity. Lecture two hours; laboratory three hours. Prerequisite: KINS 151. Units: 3.0

OR

KINS 151D Applied Kinesiology and Biomechanics. Fundamentals of human movement patterns with an emphasis on applied anatomy, movement principles, movement sequences, applied biomechanics, developmental motor stages and basic movement analysis. Prerequisite: BIO 30 or BIO 26. Units: 3.0

Exercise Physiology (1 semester)

KINS 152 Physiology of Exercise. Study of circulatory, respiratory and metabolic response to exercise in humans under various physiological and ambient conditions. Lecture two hours; laboratory three hours. Units: 3.0

OR

KINS 150 Exercise and Sport Physiology. Sports physiology with special emphasis on studying the various systems in the body that are involved in work, exercise and sport. Training programs to improve these systems and their responses will be discussed in a wide variety of settings including exercise for health, fitness, recreation, and sports competition. Lecture two hours; laboratory three hours. Prerequisite: BIO 30 or BIO 26. Units: 3.0