

Environmental Public Health Course Descriptions

BIOL 124: Environmental Science/Lab (4)

Prerequisite: None

This course is a study of basic interrelationships of organisms and their environment. A special emphasis is the effects of man's technology on the environment.

BIOL 150: General Biology/Lab I (4)

Prerequisite: None

This course is an introductory study of the scientific method, chemical and physical organization of living matter, how living things obtain and use energy, the basic structure and function of cells, heredity, and other basic concepts.

BIOL 202: Introduction to Microbiology/Lab I (4)

Prerequisite: BIOL 150 General Biology or instructor approval

This course is a study of microbes important to man including human pathogens and diseases. Laboratory work includes methods of culturing, staining and identification of common microbe forms.

BIOL 220: Anatomy & Physiology/Lab I (4)

Prerequisite: General Biology/Lab BIOL 150, General Chemistry CHEM 115 or 121

This course is an introductory study of the basic chemistry, cellular biology, integument system, skeletal system, muscular system, and nervous system.

CHEM 116: Introduction to Organic Chemistry & Biochemistry/Lab (4)

Prerequisite: CHEM 115 or CHEM 121

This course is the study of alkanes, alkenes, and alkynes aromatics, alcohols, phenols, ethers, aldehydes/ketones, carboxylic acids and esters, amines and amides, carbohydrates, lipids, amino acids, proteins, and nucleic acids.

CHEM 121: General Chemistry/Lab I (4)

Prerequisite: One year of high school chemistry (or some college chemistry) and two years of high school algebra (or one year of college algebra).

This course is the study of matter, measurement, atoms, ions, molecules, reactions, chemical calculations, thermo chemistry, bonding, molecular geometry, periodicity, and gases.

CHEM 122: General Chemistry/Lab II (4)

Prerequisite: CHEM 121 General Chemistry/Lab I

This course is the study of intermolecular forces, liquids, solids, kinetics, equilibria, acids, and bases, solution chemistry, precipitation, thermodynamics, and electrochemistry.

MATH 105: Trigonometry (3)

Prerequisite: MATH 103 College Algebra or MATH 111 College Algebra I

In this course the student will study triangle trigonometry, trigonometric functions, trigonometric identities and equations and applications of trigonometry.

MATH 111: College Algebra I (3)

Prerequisite: Placement based on TMCC Math Placement Test or MATH 102 Intermediate Algebra

In this course the student will cover graphs and technology, equations, inequalities, functions and their graphs, polynomials and rational functions.

MATH 112: College Algebra II (3)

Prerequisite: Prerequisite: MATH 111 College Algebra I

In this course the student will cover exponential and logarithmic functions, systems of equations and equalities, discrete algebra and analytic geometry.

MATH 210: Statistics I (3)

Prerequisite: Math 112 or MATH 103 or department approval.

In this course the student will study the description of sample data, numerical methods for analyzing data, normal distribution, sampling, estimation, hypothesis testing, linear correlation, regression, probability, rules of probability, discrete probability distributions and the properties, chi-square distribution, analysis of variance and nonparametric statistics. Emphasis is given to application in word problems.

PHYS 211: College Physics/Lab I (4)

Prerequisite: MATH Trigonometry

This is a beginning course for students without a calculus background. It covers basic principles of bodies at rest and in motion.