

**Physics I (3cr.) with lab (1cr.)**

Example: Kinematics, Newton's Laws, conservations laws, gravitation, fluids, sound, and thermodynamics.

**Physics II with lab (3cr.) with lab (1cr.)**

Example: Electricity and magnetism, field theory, geometrical and wave optics, statics and dynamics

**Chemistry 1 with lab (3cr.) with lab (1cr.)**

Example: Fundamental principles of general chemistry: states of matter, atomic structure, stoichiometry, chemical bonding, acid-base reactions, and gas laws.

**Chemistry 2 with lab (3cr.) with lab (1cr.)**

Example: Fundamental principles of chemistry: thermodynamics, solutions, kinetics, equilibrium and electrochemistry.

**Psychology (2 courses, 6 cr.)**

*Human Growth and Development:* Example: Development of personality, intelligence, and motivation, from childhood to adulthood. May include but not limited to the physical, cognitive, social and emotional development of human beings from conception to death.

*Psychology of Aging:* Example: Factors that contribute to the psychological profile characterizing old age including Biological and sociological components and their impact on perceptual, cognitive, and personality processes.

*Abnormal Psychology:* Example: Psychopathology manifestations, and social and personal consequences of behavior disturbance. Can include but not limited to impact of mental disorders on individuals, families, and society and the impact of cultural factors, public attitudes, community resources, ethical issues, and legislation on the diagnosis and treatment of mental disorders.

*Introduction of Psychology:* Example: Overview of the field of psychology. Should include but not limited to: The biological and environmental bases of behavior, theories and concepts in areas such as personality, intelligence, learning, motivation, emotions and mental illness.

**Statistics (1 course, 3cr.)**

Introduction to Statistics: Example: Descriptive statistics. Basic probability rules. Discrete and continuous probability distributions. Point and interval estimation, Student t-tests. May also include Analysis of Variance, simple linear regression, regression, correlation, basic nonparametric tests, and goodness of fit tests.

## **Option 1**

**General Biology (3cr.) with lab (1cr.):** Example: Biomolecules, cells, energy flow, genetics, and physiology. Scientific principles governing human structure, function, health, and relationship to the planetary environment.

**Human Physiology (3cr.) with lab (1cr.):** Example: Including but not limited to: Physiology of organism's major organ systems with emphasis on humans. Principles of physics, cell biology, and anatomy in order to explain how the different organs systems work individually and in the context of the whole organism. Basic facts and concepts relating to the physiology of cells and nervous, muscular, and cardiovascular systems, with emphasis on regulatory mechanisms.

**Human Anatomy (3cr.) with lab (1cr.):** Example: Study of the organ systems of the human body with major emphasis on the skeletal, muscular, and peripheral nervous system.

## **Option 2**

**General Biology (3cr.) with lab (1cr.):** Example: Biomolecules, cells, energy flow, genetics, and physiology. Scientific principles governing human structure, function, health, and relationship to the planetary environment.

**Human Anatomy & Physiology 1 (3cr.) with lab (1cr.):** Example: Should include study of the structure, function, and physiology of the human body, Endocrine, Cardiovascular, Lymphatic, Respiratory, Digestive, Urinary, and Reproductive Systems.

**Human Anatomy & Physiology 2 (3cr.) with lab (1cr.):** Example: A continuation of the study and application of the structure and function of the Endocrine, Cardiovascular, Lymphatic, Respiratory, Digestive, Urinary, and Reproductive Systems as well as development.