

BIOL – Biology

BIOL 1111 –Biology I

3 Credits 3 Contact Hours

Prerequisites: Regular Status

Corequisites: BIOL 1111L

Provides an introduction to basic biological concepts with a focus on living cells. Topics include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology.

BIOL 1111L –Biology I Lab

1 Credits 3 Contact Hours

Prerequisites: Regular Status

Corequisites: BIOL 1111

Selected laboratory exercises paralleling the topics in BIOL 1111. The laboratory exercises for this course include chemical principles related to cells, cell structure and function, energy and metabolism, cell division, protein synthesis, genetics, and biotechnology, and evolution.

BIOL 1112 –Biology II

3 Credits 3 Contact Hours

Prerequisites: BIOL 1111 with a minimum grade of C;

BIOL 1111L with a minimum grade of C

Corequisites: BIOL 1112L

Provides an introduction to basic evolutionary concepts. Also, the course emphasizes animal and plant diversity, structure and function including reproduction and development, and the dynamics of ecology as it pertains to populations, communities, ecosystems, and biosphere. Topics include principles of evolution, classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere.

BIOL 1112L –Biology II Lab

1 Credits 3 Contact Hours

Prerequisites: BIOL 1111 with a minimum grade of C;

BIOL 1111L with a minimum grade of C

Corequisites: BIOL 1112

Selected laboratory exercises paralleling the topics in BIOL 1112. The laboratory exercises for this course include principles of evolution, classification and characterizations of organisms, plant structure and function, animal structure and function, principles of ecology, and biosphere. Required laboratory components include microscopic studies, biodiversity exercises, and dissections.

BIOL 2113 - Anatomy and Physiology I

3 Credits 3 Contact Hours

Prerequisites: Regular Status

Corequisites: BIOL 2113L

Introduces the anatomy and physiology of the human body. Emphasis is placed on the development of a systemic perspective of anatomical structures and physiological processes. Topics include body organization, cell structure and functions, tissue classifications, integumentary system, skeletal system, muscular system, and nervous and sensory systems.

BIOL 2113L - Anatomy & Physiology Lab I

1 Credits 3 Contact Hours

Prerequisites: Regular Status

Corequisites: BIOL 2113

Selected laboratory exercises paralleling the topics in BIOL 2113. The laboratory exercises for this course include body organization, cell structure and functions, tissue classifications, integumentary systems, skeletal system, muscular system, and nervous sensory systems. Required laboratory components include microscopic studies, physiology exercises, and dissections.

BIOL 2114 - Anatomy and Physiology II

3 Credits 3 Contact Hours

Prerequisites: BIOL 2113 with a minimum grade of C;

BIOL 2113L with a minimum grade of C

Corequisites: BIOL 2114L

Continues the study of the anatomy and physiology of the human body. Topics include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive system.

BIOL 2114L - Anatomy & Physiology Lab II

1 Credits 3 Contact Hours

Prerequisites: BIOL 2113 with a minimum grade of C;

BIOL 2113L with a minimum grade of C

Corequisites: BIOL 2114

Selected laboratory exercises paralleling the topics in BIOL 2114. The laboratory exercises for this course include the endocrine system, cardiovascular system, blood and lymphatic system, immune system, respiratory system, digestive system, urinary system, and reproductive. Required laboratory components include microscopic studies, physiology exercises, and dissections.

BIOL 2117 - Introductory Microbiology

3 Credits 3 Contact Hours

Prerequisites: BIOL 2113 with a minimum grade of C

and BIOL 2113L with a minimum grade of C or

BIOL 1111 with a minimum grade of C and

BIOL 1111L with a minimum grade of C

Corequisites: BIOL 2117L

Provides students with a foundation in basic microbiology with emphasis on infectious disease. Topics include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, microorganisms, and human disease.

BIOL 2117L - Introductory Microbiology Lab

1 Credits 3 Contact Hours

Prerequisites: BIOL 2113 with a minimum

grade of C and BIOL 2113L with a minimum grade of C

or

BIOL 1111 with a minimum grade of C and

BIOL 1111L with a minimum grade of C

Corequisites: BIOL 2117

Selected laboratory exercises paralleling the topics in BIOL 2117. The laboratory exercises for this course include microbial diversity, microbial cell biology, microbial genetics, interactions and impact of microorganisms and humans, and microorganisms and human disease.