BIOL-BIOLOGY (BIOL)

BIOL 101G. Human Biology

3 Credits

Introduction to modern biological concepts. Emphasis on relevance to humans and their relationships with their environment. Cannot be taken for credit after successful completion of BIOL 111G or BIOL 211G. Appropriate for non-science majors. Requires successful completion of BIOL 101GL in order to meet the NM Common Core Area III Laboratory Science requirements.

BIOL 101GL. Human Biology Laboratory

1 Credit

Laboratory for BIOL 101G. Laboratory experiences and activities exploring biological concepts and their relevance to humans and their relationship with their environment.

Prerequisite(s)/Corequisite(s): BIOL 101G.

BIOL 110G. Contemporary Problems in Biology

4 Credits (3+3P)

Fundamental concepts of biology will be presented using examples from relevant problems in ecology, medicine and genetics. For nonscience majors only. Community Colleges only.

BIOL 111G. Natural History of Life

3 Credits (3)

Survey of major processes and events in the genetics, evolution, and ecology of microbes, plants and animals, and their interactions with the environment. Appropriate for science and nonscience majors. Must be taken with BIOL 111L to meet general education requirements. May be repeated up to 3 credits.

Prerequisite(s)/Corequisite(s): Currently enrolled in MATH 120, grade of C- or better in MATH 120, or a Math Placement Exam score adequate to enroll in mathematics courses beyond MATH 120.

BIOL 111GL. Natural History of Life Laboratory

1 Credit

Laboratory for BIOL 111G. Laboratory experiences and activities exploring biological concepts and their relevance to humans and their relationship with their environment. Must have passed BIOL 111G, MATH 120 or higher, and a C- or better in CHEM 110G or CHEM 111G or CHEM 115.

BIOL 211G. Cellular and Organismal Biology

3 Credits

Introduction to modern biological concepts. Emphasis on relevance to humans and their relationships with their environment. Cannot be taken for credit after successful completion of BIOL 111G or BIOL 211G. Appropriate for non-science majors. Requires successful completion of BIOL 101GL in order to meet the NM Common Core Area III Laboratory Science requirements.

BIOL 211GL. Cellular and Organismal Biology Laboratory

1 Credit

Laboratory demonstrations, experiments and exercises on molecular and cellular biology and organismal physiology. Must have passed BIOL 211G or be concurrently enrolled in BIOL 211G and BIOL 211L. Pre/ May be repeated up to 1 credits.

Prerequisite(s)/Corequisite(s): a C- or better in BIOL 211G, MATH 120 or higher, and a C- or better in CHEM 110G or CHEM 111G or CHEM 115.

BIOL 219. Public Health Microbiology

3 Credits

The characteristics of pathogenic microorganisms and the diseases that they cause. Will not meet the microbiology requirements for biology or medical technology majors.

Prerequisite: BIOL 211G and BIOL 211GL.

BIOL 221. Introductory Microbiology

3 Credits

Principles of isolation, taxonomy, and physiology of microorganisms. Restricted to Community Colleges campuses only.

Prerequisite(s): CHEM 110G or CHEM 111G or CHEM 112G.

Corequisite(s): BIOL 221 L.

BIOL 221 L. Introductory Microbiology Laboratory

1 Credit

A laboratory course to accompany BIOL 221 or BIOL 219.

Prerequisite: BIOL 221 or BIOL 219 or concurrent enrollment.

BIOL 225. Human Anatomy and Physiology I

4 Credits (3+3P)

The first in a two-course sequence that covers the structure and function of the human body, including terminology of the human gross anatomy, chemistry overview, cell structure, cell physiology (including DNA, protein synthesis and cell division). The organization of cells and tissues and their metabolic and homeostatic processes and regulation are also covered. Physical and chemical operation of organs and systems of the human body include the integumentary, skeletal, muscular, and nervous systems. Pre/ Restricted to: Community Colleges only.

Corequisite(s): CHEM 110G or CHEM 111G.

BIOL 226. Human Anatomy and Physiology II

4 Credits (3+3P)

The second in a two-course sequence that covers the structure and function of the human body. Includes the physical and chemical operation of the organs and systems of the human body, including endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproduction system. Concepts of nutrition, metabolism, energy, fluid and electrolyte balance, heredity pregnancy and human embryonic and fetal development are also covered. Restricted to: Community Colleges only.

Prerequisite(s): BIOL 225, CHEM 110G or CHEM 111G.

BIOL 227. Pathophysiology

3 Credits

A study of the structure and function of the human body with specialized emphasis on disease processes.

Prerequisite(s): AHS 153 or BIOL 225 Corequisite/Prerequisites(s): AHS 154 or BIOL 226 Restricted to: Community Colleges only.

BIOL 250. Special Topics

1-3 Credits

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 6 credits. Community Colleges only.
BIOL 253. Human Anatomy
4 Credits (3+3P)
Detailed presentations of human anatomy, with laboratory. For nursing, prenursing, and human nutrition and food science majors only. Restricted to: HNFS, PNUR majors.
Prerequisite(s): Grade of C- in BIOL 211G and either CHEM 111G or CHEM 110G.

BIOL 254. Human Physiology
3 Credits
Physical and chemical operation of the organs and systems of the human body. Not open to students who have passed BIOL 354 or BIOL 381.
Prerequisite(s): Grade of at least C- in BIOL 211G; BIOL 211GL; CHEM 111G or CHEM 110G.

BIOL 262. Human Pathophysiology I
3 Credits
The first in a two-course sequence that covers changes in body physiology that result from disease or injury. Includes a general introduction to pathophysiology as well as an overview of altered cellular and tissue biology, injury, inflammation, and neoplasia. Students will also explore deviation from fluid, hemodynamic, and endocrinologic balance. Topics related to the science of pathophysiology, including pathology, pathogenesis, etiology, epidemiology, and clinical manifestations, are also discussed throughout the course where relevant. Grade of C- or higher in microbiology is recommended. Restricted to Community Colleges campuses only.
Prerequisite(s): Grade of C- or higher in BIOL 225 and BIOL 226.

BIOL 263. Pathophysiology II
3 Credits
The second in a two-course sequence that covers changes in body physiology that result from disease or injury. This course focuses on the pathophysiology of the nervous, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Topics related to the science of pathophysiology, including pathology, pathogenesis, etiology, epidemiology, and clinical manifestations, are also discussed throughout the course where relevant. Grade of C- or higher in microbiology is recommended. Restricted to Community Colleges campuses only.
Prerequisite(s): Grade of C- or higher in BIOL 225, BIOL 226, and BIOL 262.