

BIOL 102: GENERAL BIOLOGY 2

Credit Hours: 3

Scheduled hours per week

Lecture: 3

Lab: 0

Other

Catalog Course Description: An application of basic biological principles to living organisms. Systematics and its application to the 3 Domains: Archaea, Bacteria, and Eukarya, including a survey of their structure and function in relation to evolutionary principles

Pre-requisites: BIOL 101 or BIO 115

Co-requisites: BIOL 104

Course Learning Outcomes:

Knowledge of basic principles of taxonomy and systematics

Ability to interpret simple cladograms

Ability to classify representative organisms into proper domain or kingdom.

Recognition of basic differences between prokaryotic and eukaryotic organisms, viruses.

Recognition of identifying characteristics of each eukaryotic kingdom, phylum, and class studied.

Ability to explain the significant features and functions of all tissues, organs, and organ systems studied.

Comparison of tissues, organs, or organ systems of designated species.

Topics to be studied:

Principles of evolution

Classification systems

Overview of prokaryotic and eukaryotic organisms, viruses

Basic anatomy and physiology of representative organisms of the main eukaryotic kingdoms

Relationship of Course to Program or Discipline Learning Outcomes:

Relationship of Course to Science Learning Outcomes:	
Students will learn the process and reasoning behind the Scientific Method and be able to conduct experiments that meet the requirements of the model.	X
Students exhibit the basic safety-related rules and regulations of working in the lab.	X
Students be able to recount the basic safety tenants associated with a specific scientific discipline.	X
Students will become proficient at Science Writing.	

Students will recognize and identify the applications of their specific discipline in the 'real world.'	X
Students will accurately recount important milestones in the history of scientific inquiry in their discipline.	
5/3/2016	

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	X
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Special requirements of the course:

None

Additional information:

None

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