

**BIOL 104 General Biology 2 Lab**

**Credit Hours:** 1

**Scheduled hours per week**

Lecture: 0

Lab: 2

Other: 0

**Catalog Course Description:** Laboratory studies in general biology that include evolution & systematics, a survey of organism diversity, and basic plant and animal anatomy.

**Pre-requisites:** None

**Co-requisites:** BIOL 102

**Course Learning Outcomes:**

- Describe the basic principles of taxonomy and systematics, ability to interpret simple cladograms, ability to classify representative organisms into proper taxonomic ranks.
- Describe the basic differences between prokaryotic and eukaryotic organisms, viruses.
- Identify the identifying characteristics of each eukaryotic kingdom, phylum, and class studied.
- Explain the significant features and functions of all tissues, organs, and organ systems studied.
- Compare tissues, organs, or organ systems of designated species.

**Topics to be studied:**

- Lab Safety
- Population genetics
- Systematics
- Prokaryotes
- Protists
- Plants
- Invertebrates
- Vertebrates
- Mammalian anatomy and physiology

**Relationship of Course to Program or Discipline Learning Outcomes:**

<b>Relationship of Course to Science Learning Outcomes:</b>	
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	

<b>Relationship of Course to General Education Learning Outcomes:</b>	
<b>Composition and Rhetoric</b> 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.	
<b>Science &amp; Technology</b> 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
<b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	X
<b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
<b>Human Inquiry &amp; the Past</b> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
<b>The Arts &amp; Creativity</b> 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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