

## OUTCOMES SCI-104 – BIOLOGY II

OUTCOME	ACTIVITIES	ASSESSMENT
Understand and explain the evolutionary relationships between the major groups of animals, and their relationships with their habitats, and with other groups of organisms.	Lectures that explain the causes and mechanisms of the evolutionary process including population genetics. followed by lab exercises that illustrate the concepts covered.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Identify the appropriate external and internal structures and their functions in representative organisms, with emphasis on the vertebrates.	Lectures in the appropriate topics followed by laboratory exercises that illustrate the concepts covered and include dissections of representative organisms.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Identify some of the distinguishing characteristics of the major animal groups studied, and to be able to recognize and/or give examples of organisms belonging to these major groups.	Lectures in the appropriate topics followed by laboratory exercises that illustrate the concepts covered and include dissections of representative organisms.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Identify (through the microscope, and in diagrams) representative examples of the major somatic tissue groups, and to demonstrate understanding of their characteristics, functions, and location in the vertebrate organism.	Lecture on the characteristics and location in humans of the tissues followed by examination and identification of the tissues using prepared slides in the lab.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Identify the basic anatomy of the different organ systems studied, and to understand the related basic physiology.	Lectures on the different organ systems followed by detail anatomical study in the lab using the pig dissection, models, and microscope slides (when appropriate).	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Recognize some of the factors which influence human health, and the causes and symptoms of some common human diseases	Discussion in class, as we talk about each system, of the different conditions that can alter their functioning. When possible show these conditions in lab.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Learn and demonstrate basic lab dissection skills.	Dissect different organisms as they are studied emphasizing evolutionary changes as we go.	Lecture exams that include situational and application questions, and laboratory practical quizzes.

<b>OUTCOME</b>	<b>ACTIVITIES</b>	<b>ASSESSMENT</b>
Learn and demonstrate lab skills associated with the objectives listed above, and to strengthen the lab skills learned in Biology I.	Do dissections, extensive microscopic studies, and anatomical studies using models.	Weekly practical quizzes in lab.
Be able to explain the basic concepts of biology in written and oral form.	Discussions in class and laboratory.	Lecture exams that include situational and application questions, and laboratory practical quizzes.
Apply the concepts learned to better understand the biological world and the problems that affect our society in general, and the life of the individual student in particular.	Discussions in class and laboratory.	Lecture exams that include situational and application questions, and laboratory practical quizzes.