

SYLLABUS
PART I
EDISON COMMUNITY COLLEGE
BIO 122S INTRODUCTION TO BIOLOGY:
ANIMALS, PLANTS AND ECOLOGY
4 CREDIT HOURS

COURSE DESCRIPTION

Continuing study of the basic concepts of biology with emphasis on the structure and function of animal and plant systems, distribution of organisms and ecology. Three hours of lecture integrated with two hours of lab activities each week. Prerequisite: BIO 121S. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Gen Ed Outcomes
2	1. Interpret the basic terminology of anatomy and physiology.	2, 5, 6
2	2. Explain the basic structure and function of major organ systems of the human body.	2, 6
4	3. Connect the total functioning of the major organ systems for maintaining homeostasis.	6
2	4. Explain the basic structure and function of vascular plants.	5, 6
2	5. Describe the total functioning of the major systems of vascular plants, necessary for growth.	6
5	6. Examine and assess the inter-relationships between living organisms and the environment.	2, 5, 6
2	7. Describe the importance of food chains and the flow of energy in ecosystems.	2, 3, 5, 6
2	8. Define and discuss the chemical elements required by living organisms and the major pathways by which they cycle in nature.	1, 2, 5, 6
4	9. Point out the fundamental laws of competition, succession, and natural selections as they appear in the natural environment.	2, 3, 6
5	10. Appraise and assess man's impact on the environment.	1, 2, 5, 6
5	11. Formulate and assess values for the diversity of life.	1, 2, 5, 6

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Principles of Structure and Function, Tissues
2. Nutrition and Digestion
3. Blood and Circulation
4. Respiration and Breathing
5. Nervous System and Senses
6. Immunity
7. Musculoskeletal System

8. Endocrine System
9. Urinary/Reproductive System and Development
10. Animal Behavior
11. Symbiosis and Community Interactions
12. Principles of Ecology
13. Structure and Function of Plants/Biomes
14. Environmental Issues: Population, Pollution and Resources