

Department:

Biology

Course Description:

This course provides a study of the structure of plants and how they live, grow, and reproduce. The course will emphasize function as a basis of life and how it is related to human problems such as population, food supply, and conservation.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Outline the development and history of plant study.
2. List the characteristics of living organisms.
3. Explain the chemical and physical bases of life.
4. Describe the physiological function of the parts of a typical plant cell.
5. Describe the physiological function of plant tissues, roots, stems, leaves, flowers, fruits, and seeds.
6. Describe the basic processes of plant metabolism, reproduction, and growth.
7. State the basic concepts of plant genetics.
8. Describe the characteristics of representatives of the following kingdoms: Monera, Protista, Fungi, and Plantae.
9. Define and explain the basic terms and concepts associated with plant ecology.

Course Content:

- A. History and Development of Plant Study
- B. Plant Cells
- C. Energy Flow and Management
- D. Genetics
- E. Heredity and Genomics
- F. Evolution
- G. Biological Diversity
- H. Plant Structure and Development
- I. Seeds and Germination
- J. Ecology

Learning Assessments:

Course competencies will be assessed by the use of lecture tests, subject area tests, lab assignments, quizzes, and Web site activities.

Instructional Materials:

Plants and Society, Levetin, McMahon, 6th Ed., McGraw-Hill, 2012
ISBN 13: 978-0073524221

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" at this link:
<https://highlandcc.edu/pages/disability-services>.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.