

those seeking the master of arts degree as a terminal graduate degree for professional advancement and those planning further education leading to the doctorate in bacteriology, microbiology, or molecular biology.

COURSES

BIOLOGY (Biol)

10. Life Science (3)

Not open to students with credit in Bot 1 or Zool 1. Principles of biology related to the cell, maintenance, and relation of living organisms, heredity and elementary processes of evolution, and basic principles of ecology. (2 lecture, 2 lab hours)

15. An Ecological Approach to Life Science (5)

Concurrent Enrollment in Anth 15, Geol 15, N Sci 15 required. Portion of *Man and the Natural Environment* Cluster (see p. 287): An introduction to biological concepts and investigational methods in the natural environment. Lecture, lab, and field work.

20. Biology and Society (3)

Not open to biology majors or to students with credit in Biol 105. Impact of recent biological discoveries upon society, now and for the future; man's animal inheritance, human genetics, genetic engineering, organ transplants, and population problems.

101. Nature Study (3)

Evaluation of natural science programs at the elementary level; optional opportunities in developing K-9 environmental study material or designing environmental awareness topics for adult groups; emphasis on life science programs dealing with the interaction of man and the biosphere. (2 lecture, 3 lab hours)

105. Human Ecology (3)

Not open to students with credit in Biol 20. Study of man's struggle with his environment from the beginning of civilization to the present; emphasis on current environmental problems.

107. Heredity and Society (3) (Former Biol 185T section)

Prerequisite: college biology, zoology, or botany. Principles of genetics and evolution as they apply to human society, thought, experience, and affairs. Ethical, social, political, and medical problems in relation to genetic engineering and other techniques.

112. Field Biology (3)

For biology minors only. Prerequisite: Bot 10, Zool 10. Local environmental and biotic interdependencies. (2 lecture, 3 lab or field hours *)

115. Symbiology (3)

Prerequisite: Biol 130, 140, or permission of instructor. The biology of symbiotic associations. (2 lecture, 3 lab hours)

120. Introduction to Genetics (3)

Prerequisite: college zoology or botany. Principles of biological inheritance, including gene structure, gene function, statistical methods, problem solving, and human genetics.

120L. Genetics Laboratory (2)

Prerequisite: Biol 120 or permission of instructor. Experimental studies on inheritance in animals, plants, bacteria and viruses. (6 lab hours)

122. Fundamentals of Human Genetics (3)

Prerequisite: college biology, zoology, or botany. Intended primarily for students in the health fields or biology. Meiosis, mitosis, chromosomes and genes. Mutations and familial diseases. Pedigrees, inbreeding, multiple genes, sex determination, blood group alleles, linkage and mapping, twins, cytogenetic and other diseases, genetic counseling.

* Late afternoon, Saturday and/or overnight field trips may be required.