

Global Learning Semesters

Course Syllabus

Course: BIOL-325 Genetics

Department: Biomedical Sciences

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
BIOL-325	Genetics	3
Semester Offered	Contact Hours	Prerequisites
Fall, Spring	56	BIOL-160 and MATH-220
Department	Level of Course	Language of Instruction
Biomedical Sciences	Upper Division	English

Course Description

The course will provide a detailed presentation of Mendelian and non-Mendelian genetics, the relationship between chromosomes and genes and the mechanisms of inheritance via gene recombination, complementation etc. The course teaches how comparative analysis of present day genomes have helped us understand aspects of the evolutionary origin of human DNA and its organization. The course introduces the student to methods for tracking Mendelian inherited genetics traits and to human genetic disorders.

Instructor

Dr. V. Anastasiadou-Christophidou

Course Aims and Objectives

To impart an in depth understanding of the basic principles of Mendelian and non-Mendelian genetics.

Teaching Methods

The course is delivered through a mixture of lectures aided by means of transparencies, and by a weekly tutorial.

Course Teaching Hours

56 hours (42 hours lectures + 14 hours tutorials)

Evaluation and Grading

Homework 15-20%
Tests: 40-50%
Final Exam: 40%

Readings and Resources

Required Textbooks

Principles of Genetics W/Genetics: From Genes to Genomes, CD-ROM and Website Password Card, 7/e, Robert H. Tamarin, McGraw-Hill 2001, ISBN:0-07-248523-X.

Recommended Reading

Human Molecular Genetics, Tom Strachan and Andrew P. Read, Wiley-Liss, 2/e, 1999, ISBN: 0471330612

Mendelian Inheritance in Man, McKusick, V.A., 12/e, John Hopkins University Press, 1997.