

## Global Learning Semesters

### Course Syllabus

Course: BIOL-460 Topics in Human Biology

Department: Health and Life Sciences

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
BIOL-460	Topics In Human Biology	3
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	All Major Requirements Of The 100-300 Series
Department	Level of Course	Language of Instruction
Health and Life Sciences	Upper Division	English

### Course Description

This course is designed to cover state of the art topics in Biology. The course format integrates searching and using biological scientific literature. The students will be introduced to the topic by experts in the field and will be given assigned reading of scientific papers related to the topic. The topics of the course will be upgraded yearly in view of new progress and scientific developments in the field. Examples of the topics to be cover during the course are given below. Student assessment will be three essays of approximately 2.000 words. The format of the course will be 3h/week lectures with assigned reading.

### Prerequisites

All Major Requirements of the 100-300 Series

### Topic Areas

1. Culture Mental Illness and the Body
2. Detection methods in Biological Anthropology
3. Sports medicine
4. Sports, Exercise and Health
5. Health care through Medical History and the Art
6. The National Health System in Cyprus
7. The Ethics of Cloning
8. Genetic Inherited Diseases in Cyprus
9. The role of religion in Medical Treatment
10. Euthanasia and patient's rights
11. Biometrics
12. Nobel Prize laureates in Biosciences and Medicine in the 90's
13. Modern Technologies in Medicine: MRI, CT, X-Rays, Laser Technology, Ultrasound
14. Biological Sciences in the corporate world
15. Professional standards in health care
16. Development and Aging
17. Nanotechnology in Biosciences

Tutorials

Through 1 hour tutorials. The student learns about tracking of genes and population screening data and is trained how to access information about DNA/protein sequences and the relevant scientific literature for any particular gene and its product through web-based databases and software. Population Genetics and human genetic disorders are discussed through data exercises, case studies presentation and the relevant literature.

## Readings and Resources

### Required Textbooks

1. Physics for the Health Sciences by Carl Nave, Brenda Nave Publisher: W.B. Saunders Company; 3rd edition (February 1, 1985) ISBN: 0721613098
2. Introduction to Physics in Modern Medicine by Suzanne Amador Kane Publisher: CRC Press; 1 edition (December 23, 2002) ISBN: 0415301718

### Recommended Reading

1. Introduction to Health Physics by Herman Cember Publisher: McGraw-Hill Professional; 3 edition (January 1, 1996) ISBN: 0071054618
2. Physics in Biology and Medicine (Complementary Science Series) by Paul Davidovits Publisher: Academic Press; 2 edition (January 15, 2001) ISBN: 0122048407
3. Walter & Miller's Textbook of Radiotherapy Radiation Physics, Therapy and Oncology, C.K. Bomford, BSc and et. al. , 2003, Publisher: Advanced Medical Publishing ISBN: 0443062013
4. Nuclear Medicine Physics, 6th ed. By Ramesh Chandra, Ph.D Lippincott Williams & Wilkins, published May 2004; ISBN:0781747538
5. Handbook of Health Physics and Radiological Health by Bernard Shleien, Lester A., Jr. Slaback, Brian Birky, Bernard Shleien Publisher: Lippincott Williams & Wilkins; 3rd edition (September 1, 1997) ISBN: 0683183346
6. Physics for Radiation Protection by James E. Martin Publisher: Wiley-Interscience; 1 edition (May 12, 2000) ISBN: 0471353736
7. Biomaterials Science : An Introduction to Materials in Medicine by B. D. Ratener, A. S. Hoffman, F. J. Schoen, J.E. Lemons Publisher: Academic Press; 2 edition (July 29, 2004) ISBN: 0125824637