

THREE BIOLOGY COURSES TO CONSIDER FOR FALL 09

BIOL4210-001 Molecular Basis of Human Disease

Instructor: Dr. William Taylor, wtaylor3@utnet.utoledo.edu

Class Meeting Times: M/W/F 1:00-1:50 in BO2043.

This course will provide a description, at the molecular level of the etiology and pathology of major human diseases. Lectures will be focused on Chronic Inflammatory Diseases, Infectious Diseases including Anthrax, Cholera, and selected viral diseases, Coronary Artery Disease and Atherosclerosis, Congenital Heart Defects, Pulmonary Diseases including Bronchitis and Emphysema, Muscular Dystrophies and Cystic Fibrosis. Grading will be based upon in-class exams as well as student presentations on a disease of interest. There is no required textbook for this course. Copies of "Human Diseases: A Systemic Approach" (ISBN 0-13-152749-5) will be placed on reserve in the library. Handouts of lecture material and relevant literature will also be provided.

BIOL4110-001 Human Genetics

Instructor: Dr. Song-Tao Liu, Song-Tao.Liu@utoledo.edu

Class Meeting Times: M/W/F 11:00-11:50 in UH4540.

This course has not been offered for years, but now re-opened to provide interested undergraduate students an opportunity to learn about basic principles of human genetics and their applications in medical practice. A textbook by Dr. Bruce R. Korf, "Human Genetics and Genomics" (3rd. ed.) will be our main resources of materials, but online sources and new developments will also be incorporated for up-to-date information. A small-size class (25 max.) is ideal for students who enjoy participation and active learning. Grading will be based on three exams (including final) and one 10-minute presentation. A systematic knowledge about human genetics will have great benefits for anyone who has career goals in health professions.

BIOL4250-001 Introduction to Neurobiology

Instructor: Dr. Bruce Bamber, Bruce.Bamber@utoledo.edu

Class Meeting Times: M/W/F 2:00-2:50 in FH2030.

The brain has long been recognized as the seat of human consciousness. This course will introduce students to the structure of the brain at the anatomical and cellular levels. It will explore the cell and molecular biology of neurons and glia, the development of the nervous system, and the physiology of nervous system function. Finally it will apply the concepts of neuronal function to the fascinating topics of sensory perception, learning and memory, neurological disease, and drug addiction. Grading will be based on in-class exams. The textbook for this course will be 'Neuroscience' Fourth Edition, by Purves and others (ISBN 978-0-87893-697-7)