



COURSE OUTLINE

MEDICAL BIOLOGY

The study of Medical Biology might be said to have originated in the human race's earliest struggles with survival. We owe much to those early herbalists who did what they could to relieve pain or fever. The importance of the scientific method itself owes much to the painstaking work of medical scientists. (A good example would be the discovery of aspirin in Oxfordshire by an amateur scientist whose curiosity had been aroused by the treatment of fever with willow bark extract.)

This course teaches the biological background to human disease and focuses specifically on the following topics:

The nervous system The structure of the nervous system and how it functions. The pathology and treatment of diseases of the nervous system.

The cardiovascular system An in-depth study of the function, pathology and treatment of this system. Structure of the blood. Introduction to the immune system.

Homeostasis and health The role of the liver and kidneys in maintaining homeostasis. Diabetes. Normal kidney function and the impact that diabetes has on this.

The gastrointestinal system How diet can affect health. The diseases of the gut.

The endocrine system How hormones interact to create balance or imbalance in the body.

Students have a wide range of interests. Many wish to have a better grasp of how the parts of the body work together; others have a scientific interest in the details; yet others are searching for general ideas about biology. For this reason, individual tutorials are used to take the work in whichever direction is preferred. The student can choose to be assessed by an end of course examination or by producing one or more papers on a topic or topics agreed with the tutor.

Recommended Reading

Background reading from any good textbook on Human Biology would be an asset to the course.

Ann Baggaley (ed) *Human Body : An Illustrated Guide* (2001) ISBN 0751335142 is a particularly helpful volume, assuming little or no prior knowledge of the subject, but it is nonetheless comprehensive and reliable.

If you are unable to obtain books locally, they may be ordered from

<http://bookshop.blackwell.co.uk>

or

www.amazon.co.uk