The University of Adelaide
Faculty of Sciences

Biology I (MBBS)
2008

Semester One
1101MED Biology I: Molecules, Genes and Cells

Semester Two
1201MED Biology I: Human Perspectives
Why study Biology?
It is obvious to anyone who watches the news on television or reads the newspaper that biology is a newsworthy topic. Almost every day we see and hear about new advances in molecular medicine, the need for finding sustainable solutions to environmental issues, the controversy about genetically modified crops and animals in agriculture, cloning of animals and allegedly humans, and so on. In fact, we live in an era in which there is an explosive increase in our understanding of biology. A number of things are driving this, some being the recent development of techniques to study and manipulate genes, and another is the vast increase in computing power that has become available over the last 20 years. Despite these advances, there are major problems facing us for which we don’t yet have solutions. We can’t cure most cancers or effectively treat inherited diseases, we don’t know how people think, learn or remember, environmental degradation in some places has reached crisis level, and it is clear that changes in land management, cropping systems and so on are essential if we are to be able to continue to feed the world. The students of the 21st century will be responsible for solving these problems.

When we look at the range of advances that have been made and the problems that still face us, we see that biology is amazingly diverse. Yet underpinning all of biology are common features; all biological systems are composed of the same types of chemical molecules, and employ similar principles of organization at the cellular level. We see this uniformity in the genetic code, the mechanism whereby the information encoded in DNA is deciphered into proteins. The first semester, will focus on these building blocks. The course is designed to cater for both students whose biology background is limited as well as those that have studied Biology at School level.

The second semester course (Human Perspectives) will build on the material that was covered in the Molecules, Genes and Cells course but has a more system-wide approach. This includes the endocrine, nervous, respiratory and immune systems as well as an understanding of the impact of gene expression on cellular development and human evolution.
SUPPORTING CHEMISTRY COURSE

An understanding of biology is facilitated by a good understanding of chemistry, and students enrolling in any of the Level I Biology courses are strongly encouraged to enrol in one of the Level I Chemistry courses, either Chemistry I A/B or Foundations of Chemistry I A/B. Students who are concerned that their background in chemistry is inadequate are encouraged to do the Introductory Course for Chemistry commencing on the 4th of February. There is a fee for this course of $470. More information about this course can be obtained from Dr Gerald Laurence, ‘phone (08) 8379 6839, mobile 0411 444 895 or email Gerald.Laurence@aduchem.com.au

PRELIMINARY LECTURES – in “O-week”

The “O-week” lectures are aimed to provide detailed information about how specific courses will operate and therefore we strongly encourage all students to attend these sessions!

This will be held on Friday FEBRUARY 29th at 8.10am in the Union Hall.

TEXTBOOK

The text for these Biology I courses is
The book can be purchased at a discount from Unibooks.

TIMETABLES

All details concerning the timetable can be obtained from the Course Planner, at http://access.adelaide.edu.au/courses/search.asp
under Subject Area: Biology
TEACHING ARRANGEMENTS FOR FIRST SEMESTER

LECTURES
There are three lectures a week, with each lecture repeated to provide flexibility in the timetable. The lectures are held at the same time on Mondays, Wednesdays, and Fridays at 8am.

TUTORIALS
Each student will attend ONE tutorial each week, and you will be expected to have done any set work PRIOR to coming to the tutorial. In the tutorials, a small group of students will work through topics that allow them to explore the material presented in the lecture series. You will have the same tutor for the entire semester and you should use them as a first point of contact for questions about the material covered.

NOBEL WORKSHOP
Each student will attend three workshop sessions devoted to an appreciation of the importance of biomedical research to clinical practice through a study of the impact of Nobel Prize winners.

MYUNI
A range of web-based materials will be used to provide information, copies of lecture handouts and stream lecture recordings. On-line quizzes will also be available.

FURTHER INFORMATION

The Convenor of Biology I is Grant Booker. He may be contacted on 8303 3090, or email grant.booker@adelaide.edu.au

Alternatively you can contact Velta Vingelis on 8303 4660, Email: velta.vingelis@adelaide.edu.au