THE UNIVERSITY of ADELAIDE COLLEGE

Foundation Studies Program

Biology

Aims

Biology aims to provide students with an appreciation for the phenomenon of life at levels ranging from the interactions of molecules to the interactions of organisms within the biosphere. The subject provides students with an opportunity to develop an understanding of basic biological concepts: the structure and function of living things, their interdependence, and their place in the environment. The subject provides the student with a broad introduction to biological terminology and concepts. Biology also aims to provide the student with practical skills, especially microscopy, suitable for the study of living organisms and includes basic skills in understanding scientific communication and methodology.

Learning outcomes

After successfully completing this subject students should be able to:

- Demonstrate an understanding of some of the key ideas of biology
- Appreciate the role of the scientific method in the accumulation of knowledge about biology
- Communicate information and ideas, using the language of biology
- Demonstrate practical and observational skills of biological systems
- Solve problems, using the knowledge and ideas of biology
- Obtain information about biology, using a variety of sources
- Gain awareness of the social implications of biological knowledge and technological advances in biology.

Prerequisites and assumed knowledge

There are no prerequisites or assumed knowledge for this subject.

Subject content

Week	Topic and assessment schedule
1	Orientation week
2 – 4	Microscopes, Cell theory
5	Scientific Method
6 – 8	Enzymes, Diffusion, osmosis and transport
8 – 10	Biological molecules, Photosynthesis
Break	
11	Revision
12 – 13	Digestive System
14 – 15	Circulatory systems
16	Respiratory system
17	Excretory system / Exams start
18	Exam Week
19	Exam review / Cell division
20	Cell division / Evolution
Break	
21 – 22	Cell division
23 – 24	DNA replication
25 – 27	Mendelian genetics
28 – 30	Natural selection
Break	
31 – 35	Ecosystems
36	Revision. SWOTVAC
37 – 38	Exams
39	Graduation and transcript collection
40	End of course

Assessment

General weightings for each assessment item are outlined below

Assessment item	Weighting	Due dates
Participation	5%	Participation throughout the year
Assignments 1-10	10%	Throughout the year
Tests 1-10	20%	Throughout the year
Presentations 1-2	5%	One per semester
Practical reports	5%	Six in first semester, two in second semester
Midyear Practical examination	10%	As per College examination timetable
Midyear Theory examination	15%	As per College examination timetable
Final Theory examination	30%	As per College examination timetable

Foundation Studies, Degree Transfer and Pre-Master's programs (The University of Adelaide) CRICOS 00123M | English language programs (Kaplan) CRICOS 03127E. Published May 2018. Version 1.