

# Course Outline

# 1. Staff

Position	Name	Email & contact details	Consultation times and locations
Course Convenor	Stephen Bonser	Level 4 Biological Sciences building s.bonser@unsw.edu.au (though please use the course email) BIOS1101@unsw.edu.au	By appointmen
Course Convenor	Hayley Bates	Level 1 Samuels Building h.bates@unsw.edu.au BIOS1101@unsw.edu.au	Tues, Wednesday Friday 1-2pr Teaching La 1 (D26)

# 2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	Program Learning Outcome (PLO)	Related Tasks & Assessment
CLO 1	Apply a working knowledge of fundamental scientific principles, methods of investigation, and an appreciation for objectivity and precision.  Develop the habit of seeking and recognising relationships between phenomena, principles, theories, conceptual frameworks and problems.  Demonstrate an understanding of the significance of science and technology in modern society.	Evolution lectures Laboratory practicals Evolution and Natural selection Quiz Practical exam Final exam
CLO 2	Demonstrate confidence and skill in approaching problems and in treating qualitative data.  Develop the habit of seeking and recognising relationships between phenomena, principles, theories, conceptual frameworks and problems.	Laboratory practicals Practical exam Final Exam
CLO 3	Develop the habit of seeking and recognising relationships between phenomena, principles, theories, conceptual frameworks and problems.	Physiology lectures Laboratory practicals Dissection assessment Plant report Practical exam Final exam
CLO 4	Apply a working knowledge of fundamental scientific principles, methods of investigation, and an appreciation for objectivity and precision.  Demonstrate confidence and skill in approaching problems and in treating both qualitative and quantitative data.  Apply curiosity, imagination, and speculation to solving problems, constructing hypotheses, and designing experiments.	Physiology lectures Laboratory practicals Dissection assessment Plant report Practical exam Final exam
CLO 5	Apply a working knowledge of fundamental scientific principles, methods of investigation, and an appreciation for objectivity and precision.  Demonstrate confidence and skill in approaching problems and in treating both qualitative and quantitative data.  Develop the habit of seeking and recognising relationships between phenomena, principles, theories, conceptual frameworks and problems.  Develop the ability and disposition to think logically	

# 3.2 Expectations of students

## Attendance at practicals

The practical aspect of biology is so important that participation in practical classes is a fundamental requirement for the award of a pass. There is one practical (lab) per week. Practicals associated with assessment tasks. If you miss a practical class, you will miss out on content that will be assessed. You can only attend the practical class in which you are enrolled. Should you be unable to

## Where to go for help

You should always check for course information provided on Moodle. Please check this first and constantly check for updates on changes to times for laboratories, upcoming assessment tasks and when they are due.

#### **Academic matters**

The first contact for help with course work is a demonstrator (i.e. the person who is present at one of the practical sessions). Consult the demonstrator if you have any difficulty with the subject material. There is a demonstrator for each bench in the laboratory. In some cases your demonstrator will also be the laboratory supervisor, or alternatively a demonstrator may refer you to the supervisor or the course administrator. Outside of class time all BIOS110 enquires should be directed to bios1101@unsw.edu.au.

## 4. Course schedule and structure

Evolutionary and Functional **Biology encompasses three major themes** as modules and will be presented in an integrated fashion.

The modules provide the framework of the course. Please refer to your course timetable on Moodle for the lecture and practical schedule.

#### **Module 1- Evolution and diversity**

#### Lectures:

What is Evolution and Functional Biology (S. Bonser)

Origins and Early Evolution of Life (M. Archer)

Specialised Cells-1 (M. Archer)

Specialised Cells-2 (M. Archer)

Feeding and Digestion (M. Archer)

Evolution and the Evidence for it (M. Archer)

Human Evolution (M. Archer)

Humans Conserving Evolution (M. Archer)

Adaptation and behaviour (R. Bonduriansky)

#### Practicals/tutorials:

**Evolution and natural Selection** 

Animal Diversity, Unity and Classification

#### **Module 2- Animal form and function**

(relate animal anatomy, physiology and reproduction to function, adaptation and the environment)

#### Lectures:

Digestion and Nutrition (H. Bates)

Circulation and Gas Exchange (H. Bates)

Animal Reproduction (R. Bonduriansky)

Animal Nervous Systems (H. Bates)

Animal Hormones (R. Bonduriansky)

#### Practicals/tutorials:

Gross Morphology 1: Toad Dissection

Gross Morphology 2: Rat Dissection

#### **Module 3- Plant form and function**

(relate plant anatomy, physiology and reproduction to function, adaptation and the environment)

#### Lectures:

Plants- Life on land (S.Bonser)

Reproduction 1 (S. Bonser)

Reproduction 2 (S. Bonser)

Internal Architecture of Plants (S. Bonser)

Plasticity (S. Bonser)

Plant Communication (S. Bonser)

Transport 1 (S. Bonser)

Transport 2 (S. Bonser)

#### Practicals/tutorials:

Diversity in Botany,

Reproduction in Flowering Plants

Plant Plasticity

## **Course Schedule**

NVEEK   LECTURE 1   LECTURE 2   LECTURE 3   PRACTICAL   TUTORIAL			T	1			
WEEK LEGIONE I LEGIONE Z LEGIONE J INVOITORE I TOTONIAL	ASSESSMENTS	TUTORIAL	PRACTICAL	LECTURE 3	LECTURE 2	LECTURE 1	WEEK
				1			

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# 5.3 Submission of assessment tasks

Please see Moodle for detailed instructions for assessment submissions. Generally, practical assessments are submitted

# 7. Readings and resources

# **Course practicals**

Available in hardcopy in class or as a pdf on Moodle course page.

## **Text books**

#### General conduct

A laboratory is for serious work not horseplay. Eating, drinking or smoking in laboratories is not allowed. Further- no food should be brought into a laboratory. Students must read the instructions to their laboratories carefully beforehand and be aware of all possible hazards.

No undergraduate students will be allowed to work in the laboratories outside class hours without permission and some supervision.

All accidents and injuries must be reported to the lecturer or demonstrator in charge

should be filled in if an accident or incident occurs without causing an injury. With injury, an o required.

Never dispose of broken glass or other dangerous rubbish in waste paper baskets. Put

### Laboratory and protective clothing

Clothes should protect your body and not be highly inflammable. Laboratory coats are essential in all laboratories. You will be asked to leave if a supervisor feels your attire puts you at risk. Where necessary, safety equipment will be provided and should be used as directed.

Closed-in shoes are compulsory so they can give adequate protection against corrosive liquids and cuts. Persons wearing thongs or arriving in bare feet will not be allowed into practical classes.

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or <a href="http://www.studentequity.unsw.edu.au/">http://www.studentequity.unsw.edu.au/</a>).

Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

#### Language Difficulties

# Equity and Diversity

Biology deals with many concepts which have to be explained in words. This requires careful and accurate use of English. In addition biology, as with any discipline, has its

	class absences such as (laboratories and tutorials), in-session assessments tasks, and final examinations.