School of Biological Sciences

BIOL392 Advanced Biology

Subject Outline
Autumn, 2016
On-Campus
Wollongong

Subject Information
Credit Points: 8
Pre-requisite(s): Distinction average or higher performance in subjects pertinent to the intended area of research, as approved by the Head of School
Co-requisite(s): Nil
Restrictions: Offered subject to availability of a research supervisor
Contact Hours: contact hours must be negotiated with the project supervisor

Subject Contacts
Subject Coordinator/Lecturer
Name: Dr Marian Wong
Location: Building 35, Room 124
Telephone: 61 2 4221 3574
Email: marian_wong@uow.edu.au
Consultation mode and times: Email for appointment

Project Supervisor
It is the responsibility of the student to identify a suitable research supervisor and project to be undertaken as the core component of this subject. Students should contact the subject coordinator in the first instance for advice, and then consult various potential supervisors for an outline of projects that are on offer. Prospective students are encouraged to discuss possible projects with a range of potential supervisors before deciding on a project. A useful starting point is the school website which outlines the research interests of all members of academic staff. A project and supervisor must be agreed with the subject coordinator no later than the first week of the session in which the project is to be undertaken. Supervision of a project will depend in part on the availability of resources

Student Support and Advice
For general enquiries please contact the StudentHub 41:
Location: 41.138B
Telephone: 61 2 4221 3492
Email: smah-students@uow.edu.au
Student Consultation and Communication

University staff receive many emails each day. In order to enable them to respond to your emails appropriately and in a timely fashion, students are asked to observe basic requirements of professional communication.

Please ensure that you include your full name and student number and identify your practical class or tutorial group in your email so that staff know who they are communicating with and can follow-up personally where appropriate.

Consider what the communication is about
- Is your question addressed elsewhere (e.g. in the subject outline or, on the eLearning site)?
- Is it something that is better discussed in person or by telephone? This may be the case if your query requires a lengthy response or a dialogue in order to address. If so, see consultation times above and/or schedule an appointment.
- Are you addressing your request to the most appropriate person?

Specific email subject title to enable easy identification of issue
- Identify the subject code of the subject you are enquiring about (as staff may be involved in more than one subject) put this in the email subject heading. Add a brief, specific query reference after the subject code where appropriate.

Professional courtesy
- Address the staff member appropriately by name (and formal title if you do not yet know them).
- Use full words (avoid ‘text-speak’ abbreviations), correct grammar and correct spelling.
- Be respectful and courteous.
- Allow 3 – 4 working days for a response before following up. If the matter is legitimately urgent, you may wish to try telephoning the staff member (and leaving a voicemail message if necessary) or inquiring at the School Office.
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Section A: General Information

Subject Learning Outcomes
On completion of this subject, students should be able to:

1. Have an understanding of scientific research in a discipline in Biological Sciences;
2. Design and execute appropriate field and/or laboratory experiments and analyse and interpret these data;
3. Demonstrate skills in the acquisition of information and its presentation in verbal and written reports.

Subject Description
One research project is to be undertaken, designed and chosen in consultation with an academic staff member. Emphasis may be placed on developing competence in a range of laboratory and field techniques not already familiar to the student. Selection for Advanced Biology is based on merit and the availability of projects, and intending students should consult the Subject Coordinator before enrolment.

eLearning Space
This subject has materials and activities available via eLearning. To access eLearning you must have a UOW user account name and password, and be enrolled in the subject. eLearning is accessed via SOLS (student online services). Log on to SOLS and then click on the eLearning link in the menu column. For information regarding the eLearning spaces please use the following link:
http://uowblogs.com/moodlelab/files/2013/05/Moodle_StudentGuide-1petpo7.pdf

Lecture, Tutorial, Laboratory Times
All timetable information is subject to variation. Check latest timetabling information on the ‘Current Student’ webpage on UOW website or log into SOLS to view your personal timetable prior to attending classes. http://www.uow.edu.au/student/index.html

Timetable information can be accessed from

Key University Dates can be accessed from

Readings, References and Materials

Textbooks
The following text(s) will need to be purchased by students enrolled in this class.

Nil

Prescribed Readings (includes eReadings)
The following readings are prescribed for this subject, but students are not expected to purchase these. They are available to students through the library on the subjects eLearning site.

The project supervisor will provide a reading list related to techniques and background specific to the project.

Materials
- Lab coat
- Scientific calculator
- Closed-toe shoes
- Wet-weather attire and sun-protection for fieldwork
Recommended Readings
The following references complement the prescribed readings and textbooks:


Recommended readings are not intended as an exhaustive list, students should use the Library catalogue and databases to locate additional resources.

Recent Changes to this Subject
Nil

Laboratory Safety Guidelines
The rules below are general rules that are required in laboratories.

- Before commencing your project you are to ensure that you understand specific procedures for the laboratory in which you work.
- You will need to fill out a risk assessment form before commencing any experiments (confer with your laboratory supervisor).
- Never use any equipment or attempt any experiment without checking the safety implications with your laboratory supervisor or experienced delegated laboratory worker.
- Undergraduate students are not permitted to work after hours unless there is appropriate approval and supervision.

Schedule of Learning*

<table>
<thead>
<tr>
<th>Week</th>
<th>Week Commencing</th>
<th>Tutorial</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29/02/2016</td>
<td>Meet and greet</td>
</tr>
<tr>
<td>2</td>
<td>07/03/2016</td>
<td>No tutorial</td>
</tr>
<tr>
<td>3</td>
<td>14/03/2016</td>
<td>Project discussion session</td>
</tr>
<tr>
<td>4</td>
<td>21/03/2016</td>
<td>No tutorial</td>
</tr>
<tr>
<td>5</td>
<td>28/03/2016</td>
<td>Tutorial 1-how to write a critique</td>
</tr>
<tr>
<td>6</td>
<td>04/04/2016</td>
<td>No tutorial</td>
</tr>
<tr>
<td>7</td>
<td>11/04/2016</td>
<td>Project discussion session</td>
</tr>
<tr>
<td>8</td>
<td>18/04/2016</td>
<td>No tutorial</td>
</tr>
<tr>
<td></td>
<td><strong>Mid-Session Recess 25th April-29th April</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>02/05/2016</td>
<td>Tutorial 2-how to write a research paper</td>
</tr>
<tr>
<td>10</td>
<td>09/05/2016</td>
<td>No tutorial</td>
</tr>
<tr>
<td>11</td>
<td>16/05/2016</td>
<td>Tutorial 3-how to give a seminar</td>
</tr>
<tr>
<td>12</td>
<td>23/05/2016</td>
<td>Project discussion following seminars</td>
</tr>
<tr>
<td>13</td>
<td>30/05/2016</td>
<td>No tutorial</td>
</tr>
</tbody>
</table>

Study Recess 6th June-10th June
UOW Exam Period 11th June-23 June

*The above timetable should be used as a guide only, as it is subject to change. Students will be advised of any changes as they become known.
Section B: Assessment

Assessment Summary

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Form of Assessment</th>
<th>Due Date</th>
<th>Return/Feedback Due date</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>Oral Critique</td>
<td>Monday, Tuesday or Wednesday Week 7 (date and time organised by the supervisor and student)</td>
<td>Within 21 days of submission</td>
<td>5%</td>
</tr>
<tr>
<td>Assessment 2</td>
<td>Written Critique</td>
<td>Friday, Week 7</td>
<td>Within 21 days of submission</td>
<td>5%</td>
</tr>
<tr>
<td>Assessment 3</td>
<td>Research Seminar</td>
<td>Friday, Week 12</td>
<td>Within 21 days of submission</td>
<td>20%</td>
</tr>
<tr>
<td>Assessment 4</td>
<td>Final Report</td>
<td>Friday, Week 13</td>
<td>Within 21 days of submission</td>
<td>70%</td>
</tr>
</tbody>
</table>

Total Marks 100%

Details of Assessment Tasks
Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.

Assessment 1

Oral Critique

Due date Monday, Tuesday or Wednesday Week 7 (date and time organised by the supervisor and student)

Weighting 5%

Submission Present a talk to the supervisor’s lab group and lead a group discussion.

Type of Collaboration Individual Assessment

Length 10 minute talk, 20 minute discussion

Details You will be required to give an oral presentation of your critique, and lead a discussion with your supervisor's lab group. You will need to prepare overheads for your presentation. The oral critique will be marked by the supervisor and one other member of academic staff. Both ‘Whole organism’ students and ‘Cell and Molecular’ students will need to ask their supervisor to organise the second marker. This should be organised no later than week 6. The student will need to provide the subject co-ordinator with the name of the second marker. The marker must be a member of academic staff.

Style and format PowerPoint presentation and group discussion

Subject learning Outcomes 1,3

Marking Criteria Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission. You will be assessed on your presentation and on your ability to lead the discussion.

Assessment 2

Written Critique

Due date Friday, Week 7

Weighting 5%

Submission Submit one electronic copy and two hard copies of your assignment to the subject co-ordinator. The hard copies must be placed in the subject co-ordinators mail box in the school of Biological Sciences

Type of Collaboration Individual Assessment

Length 1500 words

Details This report should highlight the key strengths and weaknesses of a published research paper.
The written critique will be marked by the supervisor and one other member of academic staff. ‘Whole organism’ students will need to ask their supervisor to organise the second marker. This should be organised no later than week 6. The student will need to provide the subject co-ordinator with the name of the second marker.

‘Cell and Molecular’ students will have their critique allocated to a second marker. This will be organised by the supervisor and the subject co-ordinator.

<table>
<thead>
<tr>
<th>Style and format</th>
<th>Written report. Details of the paper being critiqued must be supplied.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking Criteria</td>
<td>Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.</td>
</tr>
</tbody>
</table>

### Assessment 3 - Research Seminar

<table>
<thead>
<tr>
<th>Due date</th>
<th>Friday, Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighting</td>
<td>20%</td>
</tr>
<tr>
<td>Submission</td>
<td>Present a seminar to the School of Biological Sciences</td>
</tr>
<tr>
<td>Type of Collaboration</td>
<td>Individual Assessment</td>
</tr>
<tr>
<td>Length</td>
<td>12 minutes, with 3 minutes for questions</td>
</tr>
<tr>
<td>Details</td>
<td>You will be required to present a seminar to the School of Biological Sciences. Other students will be presenting during the session. The seminar will be marked by attending academics. The location of the seminars will be provided by the subject co-ordinator in week 10 or week 11. Talks must be uploaded onto the lecture theatre computer 5 minutes before the session commences.</td>
</tr>
<tr>
<td>Style and format</td>
<td>Power point presentation</td>
</tr>
<tr>
<td>Marking Criteria</td>
<td>Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.</td>
</tr>
</tbody>
</table>

### Assessment 4 - Final Report

<table>
<thead>
<tr>
<th>Due date</th>
<th>Friday, Week 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighting</td>
<td>70%</td>
</tr>
<tr>
<td>Submission</td>
<td>Submit one electronic copy and two hard copies of your assignment to the subject co-ordinator. The hard copies must be placed in the subject co-ordinators mail box in the School of Biological Sciences.</td>
</tr>
<tr>
<td>Type of Collaboration</td>
<td>Individual Assessment</td>
</tr>
<tr>
<td>Length</td>
<td>25-30 pages</td>
</tr>
<tr>
<td>Details</td>
<td>Students are required to submit a final project report. This can be prepared along the same formal lines as a 4th year Honours thesis, with the exception that it should be only about one-half the length. Alternatively, the report can be written as a scientific paper. In this case you should choose a journal appropriate to your project and follow the instructions for authors for that journal. Include a copy of the instructions that you have followed with your report.</td>
</tr>
<tr>
<td>Style and format</td>
<td>Report</td>
</tr>
<tr>
<td>Marking Criteria</td>
<td>Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.</td>
</tr>
</tbody>
</table>
Minimum Requirements for a Pass in this Subject
To receive a clear pass in this subject a total mark of 50% or more must be achieved. In addition, failure to meet any of the minimum performance requirements is grounds for awarding a Technical Fail (TF) in the subject, even where total marks accumulated are greater than 50%.

The minimum performance requirements for this subject are:

• attempt all assessment tasks
• pass all assessment tasks
• meet the minimum participation requirements set out below.

Minimum Student Attendance and Participation
It is expected that students will allocate 16 hours per week to this subject, including any required class attendance, completion of prescribed readings and assessment tasks.

Student attendance at tutorials is not compulsory but is strongly recommended.

It is the responsibility of the student to coordinate appropriate meetings with their project supervisor.

Scaling
Scaling will not occur in this subject.

Late Submission
Late submission of an assessment task without an approved extension of the deadline is not acceptable. If you are unable to submit an assessment due to extenuating circumstances (e.g. medical grounds or compassionate grounds), you can make an application of academic consideration. Not all circumstances qualify for academic consideration. For further details about applying for academic consideration visit the Student Central webpage:


Late Submission Penalty
Late submission of an assessment task without an approved extension of the deadline is not acceptable. Marks will be deducted for late submission at the rate of 10% of the total possible marks for that particular assessment task per day. This means that if a piece of work is marked out of 100, then the late penalty will be 10 marks per day (10% of 100 possible marks per day). The formula for calculating the late penalty is the total possible marks x 0.10 x number of days late. For the purposes of this policy a weekend (Saturday and Sunday) will be regarded as two days.

No marks will be awarded for work submitted after the assessment has been returned to the students.

Supplementary Assessments
Supplementary assessment may be offered to students whose performance in this subject is close to that required to pass the subject, and are otherwise identified as meriting an offer of a supplementary assessment. The precise form of supplementary assessment will be determined at the time the offer of a supplementary assessment is made.

Students can log on to SOLS and click on the link titled “Supplementary Assessment” to view any applicable offers. Addition information on supplementary assessments is available at:


System of Referencing Used for Written Work
The Author-Date (Harvard) referencing system should, unless otherwise specified for a particular assessment (check Details of Assessment Tasks), be utilised. A summary of the Harvard system can be accessed on the Library website at: http://public01.library.uow.edu.au/refcite/style-guides/html/
Use of Internet Sources
Students are able to use the Internet to access the most current information on relevant topics and information. Internet sources should only be used after careful critical analysis of the currency of the information, the role and standing of the sponsoring institution, reputation and credentials of the author, the clarity of the information and the extent to which the information can be supported or ratified by other authoritative sources.

Plagiarism
The full policy on Academic Integrity and Plagiarism is found in the Policy Directory on the UOW website.

“The University’s Academic Integrity and Plagiarism Policy, Faculty Handbooks and subject guides clearly set out the University’s expectation that students submit only their own original work for assessment and avoid plagiarising the work of others or cheating. Re-using any of your own work (either in part or in full) which you have submitted previously for assessment is not permitted without appropriate acknowledgement. Plagiarism can be detected and has led to students being expelled from the University.

The use by students of any website that provides access to essays or other assessment items (sometimes marketed as ‘resources’), is extremely unwise. Students who provide an assessment item (or provide access to an assessment item) to others, either directly or indirectly (for example by uploading an assessment item to a website) are considered by the university to be intentionally or recklessly helping other students to cheat. This is considered academic misconduct and students place themselves at risk of being expelled from the University.”

Submission of Assessments
Refer to the submission requirements under the details of the individual assessments. Students should ensure that they receive a receipt acknowledging submission. Students will be required to produce this in the event that an assessment task is considered to be lost. Students are also expected to keep a copy of all their submitted assessments in the event that re-submission is required.

Assessment Return
Students will be notified when they can collect or view their marked assessment. In accordance with University Policy marked assessments will usually only be held for 21 days after the declaration of marks for that assessment.
Section C: General Advice

Students should refer to the Faculty of Science, Medicine and Health website for information on policies, learning and support services and other general advice.

University Policies

Students should be familiar with the following University policies:

a. Code of Practice – Teaching and Assessment

b. Code of Practice – Research, where relevant

c. Code of Practice – Honours, where relevant

d. Student Charter

e. Code of Practice – Student Professional Experience, where relevant

f. Academic Integrity and Plagiarism Policy

g. Student Academic Consideration Policy

h. Course Progress Policy

i. Graduate Qualities Policy

j. Academic Complaints Policy (Coursework and Honours Students)

k. Policy and Guidelines on Non-Discriminatory Language Practice and Presentation

l. Workplace Health and Safety, where relevant

m. Intellectual Property Policy

n. IP Student Assessment of Intellectual Property Policy, where relevant

o. Policy on Ethical Objection by Students to the Use of Animal and Animal Products in Coursework Subjects, where relevant

p. Human Research Ethics Guidelines, where relevant

q. Animal Research Guidelines, where relevant
r. Student Conduct Rules and accompanying Procedures or Research Misconduct Policy for research students

Student Support Services and Facilities
Students can access information on student support services and facilities at the following link. This includes information on “Academic Support”, “Starting at University,” “Help at University” as well as information and support on “Career’s and Jobs”. http://www.uow.edu.au/student/services/index.html

Student Etiquette
Guidelines on the use of email to contact teaching staff, mobile phone use in class and information on the university guide to eLearning ‘Netiquette’ can be found at http://www.uow.edu.au/student/elearning/netiquette/index.html

Version Control Table

<table>
<thead>
<tr>
<th>Version Control</th>
<th>Release Date</th>
<th>Author/Reviewer</th>
<th>Approved By</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20151207</td>
<td>Dr Marian Wong – Subject Coordinator</td>
<td>Mrs Sonia Losinno – ADE Nominee</td>
<td>FINAL BIOL392 Autumn 2016 Subject Outline</td>
</tr>
</tbody>
</table>