School of Chemistry

CHEM232: Science Research Internship

Subject Outline
Autumn, 2016
On-Campus
Wollongong

Subject Information
Credit Points: 6
Pre-requisite(s): 48 credit points, including 24 credit points of Science Schedule subjects or equivalent with a WAM of 70% or better. Admission is by application to and acceptance by the Head of School and an Academic Supervisor.
Co-requisite(s): Nil
Restrictions: Nil
Contact Hours: 100 hours total lab or field work.

Subject Contacts
Subject Coordinator
Name: A/Prof Stephen Ralph
Location: Building 18, Room 226
Telephone: 61 2 4221 4286
Email: stephen_ralph@uow.edu.au
Consultation mode and times: Email for appointment.

Internship is completed under the guidance of a specific project supervisor their details should be entered below by the student:

Name:
Location:
Telephone:
Email:
Consultation mode and times:

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 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:

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.
- 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.
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Section A: General Information

Subject Learning Outcomes

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

1. Apply relevant laboratory and/or field methods efficiently and accurately, in a particular field of research in science
2. Work as part of a research team to achieve defined objectives
3. Display and analyse research results appropriately
4. Critically assess presentation of methods in published work and in research seminar presentations
5. Understand and apply OH&S principles and risk assessment to laboratory and/or field projects

Subject Description

This internship subject will provide students who have an interest in research with the opportunity to learn how research is done by working alongside researchers in an active research group. Emphasis will be on learning practical skills in the selected discipline, working as part of a team, achieving research objectives in laboratory or field work, accurately recording methods and results, and critically evaluating the research methods of others.

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 the latest information on the university web timetable via the Timetable link under Study Resources on the Current Students webpage or log into SOLS to view your personal timetable prior to attending classes.


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 texts 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.

Nil
Materials
Nil

Recommended Readings
The following references complement the prescribed readings and textbooks:
Nil

Recent Changes to this Subject
i. Nil

List of Topics Covered
As this is an internship subject the topics covered will be negotiated between the student and their project supervisor.
Section B: Assessment

Assessment Summary

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Form of Assessment</th>
<th>Due Date</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>Completion of OH&amp;S Induction</td>
<td>Before starting lab work</td>
<td>satisfactory/unsatisfactory</td>
</tr>
<tr>
<td>Assessment 2</td>
<td>Completion of 100 Hours Lab/Field Work and Report</td>
<td>By the end of week 12 of the final session in which this subject is running.</td>
<td>satisfactory/unsatisfactory</td>
</tr>
<tr>
<td>Assessment 3</td>
<td>Attendance at Five Seminars</td>
<td>After each presentation</td>
<td>satisfactory/unsatisfactory</td>
</tr>
</tbody>
</table>

Note: This subject will be assessed as “satisfactory/unsatisfactory”, rather than being graded.

Details of Assessment Tasks

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

Assessment 1

- **Completion of OH&S Induction**
  - Due date: Before starting lab work
  - Weighting: satisfactory/unsatisfactory
  - Submission: Completion of an online task after the Induction Session.
  - Type of Collaboration: Individual Assessment
  - Length: Quiz length 1-2 hours.
  - Details: A tour of labs followed by a short quiz
  - Style and format: On-line Quiz
  - Subject Learning Outcomes: 1-5
  - Marking Criteria: satisfactory/unsatisfactory

Assessment 2

- **Completion of 100 Hours Lab/Field Work and Report**
  - Due date: By the end of week 12 of the final session in which this subject is running.
  - Weighting: satisfactory/unsatisfactory
  - Submission: Submit a hardcopy of your assessment to your Project Supervisor
  - Type of Collaboration: Individual Assessment
  - Length: 15-20 A4 pages - Maximum length.
  - Details: Laboratory experimentation and data analysis. Students are required to complete the requisite hours of laboratory or field work (100 hours) as recorded in the work book and have this signed off by the direct supervisor. They are also required to attend all three scheduled meetings with the supervisor(s)
    - Report should include a detailed literature review, details of experiments carried out, results, analysis and discussion. This paper is to be the basis for the final meeting with the supervisor(s)
  - Style and format: Class Participation
  - Subject Learning Outcomes: 1-5
  - Marking Criteria: satisfactory/unsatisfactory
**Assessment 3**

<table>
<thead>
<tr>
<th>Assessment 3</th>
<th>Attendance at Five Seminars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due date</td>
<td>2 days after each presentation.</td>
</tr>
<tr>
<td>Weighting</td>
<td>satisfactory/unsatisfactory</td>
</tr>
<tr>
<td>Submission</td>
<td>Submit a hardcopy of your seminar summary to your Project Supervisor</td>
</tr>
<tr>
<td>Type of Collaboration</td>
<td>Individual Assessment</td>
</tr>
<tr>
<td>Length</td>
<td>2-4 A4 pages - Maximum length.</td>
</tr>
<tr>
<td>Details</td>
<td>Relevant technical seminars should be attended during the session. A short summary of the presentation in the form of a scientific abstract which assesses details of results and methods components of six research projects (research seminars, posters, or published papers)</td>
</tr>
<tr>
<td>Style and format</td>
<td>Essay</td>
</tr>
<tr>
<td>Subject Learning Outcomes</td>
<td>1-5</td>
</tr>
<tr>
<td>Marking Criteria</td>
<td>satisfactory/unsatisfactory</td>
</tr>
</tbody>
</table>

**Minimum Requirements for a Pass in this Subject**

To receive a clear pass in this subject a student must obtain a satisfactory grade for all assessment tasks. If a student does not obtain a satisfactory grade for an assessment task they will be asked to revise and resubmit it for grading. Failure to meet this requirement for all assessment tasks prior to the end of the final week of the final session that this subject is running will result in a grade of Fail (F) for this subject.

The minimum performance requirements for this subject are:

- Completion of all assessment tasks

**Minimum Student Attendance and Participation**

Student participation in the OH&S induction, completion of 100 hours of lab/field work and attendance at meetings stipulated by the supervisor are compulsory and students must attend at least 100% of classes. Absences will require the submission of an application for Academic Consideration via SOLS and the presentation of suitable documentation, for example a Medical Certificate, to Student Central as soon as practical. For further details about applying for academic consideration visit the Student Central webpage: [http://www.uow.edu.au/student/central/academicconsideration/index.html](http://www.uow.edu.au/student/central/academicconsideration/index.html)

**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: [http://www.uow.edu.au/student/central/academicconsideration/index.html](http://www.uow.edu.au/student/central/academicconsideration/index.html)

**Late Submission Penalty**

For late submission penalty requirements, please refer to the above section entitled ‘Minimum Requirements for a Pass in this Subject’

Notwithstanding this, students must complete all assessment tasks to a satisfactory standard and submit them, regardless of lateness, where submission is a condition of satisfactorily completing this subject.
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 or use the following link; http://www.uow.edu.au/student/exams/suppassess/index.html

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/evidence acknowledging assessment 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 assignments in the event that re-submission is required.

Assessment Return

Students will be notified when they are able to view their marked assessment. In accordance with University Policy marked assignments will usually only be held for 21 days after the declaration of marks for that assignment.
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>Start from 1</td>
<td>YYYYMMDD</td>
<td>Contact person – full name &amp; title</td>
<td>Contact person – full name &amp; title</td>
<td>Include what the amendment is to the document.</td>
</tr>
</tbody>
</table>

This section will be completed by the SMAH Education Unit once approval is received from the Subject Coordinator. Upon receiving this approval the document will be labelled as version 1 and uploaded to the website. Any further changes will be considered a new version. If the change is significant it will need to be approved by the Executive Dean.