School of Chemistry

CHEM218: Special Chemistry Studies

Subject Outline
Autumn 2016
On-Campus
Wollongong

Subject Information
Credit Points: 6
Pre-requisite(s): Entry restricted to Bachelor of Science Advanced Honours candidates. Must have completed CHEM101, CHEM102
Co-requisite(s): Nil
Restrictions: Nil
Contact Hours: 6hr Laboratory session per week

Subject Contacts
Subject Coordinator/Lecturer

<table>
<thead>
<tr>
<th>Name:</th>
<th>Dr Wilford Lie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Building 18, Room G02/04</td>
</tr>
<tr>
<td>Telephone:</td>
<td>61 2 4221 3513 or 4221 3473</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:wilford@uow.edu.au">wilford@uow.edu.au</a></td>
</tr>
<tr>
<td>Consultation mode and times:</td>
<td>Email for an appointment</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Location:</th>
<th>41.138B</th>
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</thead>
<tbody>
<tr>
<td>Telephone:</td>
<td>61 2 4221 3492</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:smah-students@uow.edu.au">smah-students@uow.edu.au</a></td>
</tr>
</tbody>
</table>
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 the subject code, your full name, student number and supervisor’s name 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. Develop understanding of research methods as they pertain to the chemical sciences
2. Develop laboratory skills in their chosen field of research
3. Develop literature skills
4. Prepare a literature review of the current state of research in their chosen field
5. Prepare a written report of the findings of their own data

Subject Description

This subject is intended to introduce advanced chemistry students to modern chemical research. It provides an opportunity for student-centred learning, allowing the student to connect the content of the conventional chemistry subjects they have already undertaken to cutting-edge chemical research. CHEM218 provides a first opportunity for undergraduate students to experience the excitement of working at the frontiers of science. The subject takes the form of a small research based project undertaken with the supervision of a member of staff and it may include research assistance, directed reading, computer-based studies and/or library assignments. Students should consult the subject coordinator and find a suitable project with a willing project supervisor prior to enrolling in CHEM218.

eLearning Space

This subject does not utilize eLearning.

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.


Timetable information can be accessed from

Key University Dates can be accessed from

Readings, References and Materials

Textbooks
Nil. There is no prescribed text for this subject

Prescribed Readings (includes eReadings)
Nil. There are no prescribed readings for this subject.

Materials
Any necessary materials to undertake the project are to be agreed upon in consultation between the student and the academic staff member supervising the project.

Recommended Readings

Relevant reading material may be allocated by the project supervisor.

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.

Ethical Objection to the Use of Animal and Animal Products
In order to achieve specific learning objectives, the use of animals, animal tissues, and or animal-derived products (such as sera) is inherent and unavoidable. Students with conscientious objections to this use should not enrol in this subject.

Students who intend to avoid a particular learning activity on the basis of conscientious objection should notify the subject coordinator in writing as soon as possible and not later than the end of Week 1 of the session. Students who do not participate in a particular learning activity are required to complete an alternative exercise (a CD-ROM is available) or attend the practical and "observe". The material involved is examinable and the prac must be written up and completed in your workbook. For further information, refer to http://www.uow.edu.au/about/policy/UOW058708.html

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.

List of Topics Covered
As this is a research based subject the list of topics covered will be negotiated between the student and their supervisor.
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 Dates</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>Research Report</td>
<td>TBA</td>
<td>Within 21 days of due date</td>
<td>100%</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

Due date: TBA
Weighting: 100%
Submission: Submit two (2) hardcopies of the report to the Subject Coordinator.
Type of Collaboration: Individual Assessment

Details

Students are assessed based on a research report in the form of a mini thesis of around 25 pages. The report is marked by the supervisor and one other member of staff who is uninvolved in the project. The second marker is agreed upon by the project supervisor and subject coordinator. Markers take into account that the report is produced by a 200-level student and therefore represents a first attempt at scientific research and writing. If the marks (out of 100) provided by the two markers differ by MORE than 10, a third mark out of 100 will be sought form a 3rd marker.

Style and format: Mini Thesis style report
Subject Learning Outcomes: 1, 2, 3, 4, 5
Marking Criteria: Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.

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:

- pass the assessment task
- meet the minimum participation requirements set out below.

Minimum Student Attendance and Participation

It is expected that students will allocate 12 hours per week to this subject, including any required class attendance, completion of prescribed readings and assessment tasks.

Students are not required to attend set classes. 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 – at 10%
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.

For example:
- Student A submits an assessment which is marked out of 100. The assessment is submitted 4 days late. This means that a late penalty of 40 marks will apply (100 x 0.10 x 4). The assessment is marked as per normal out of 100 and is given a mark of 85/100, and then the late penalty is applied. The result is that the student receives a final mark of 45/100 for the assessment (85 (original mark) – 40 marks (late penalty) = 45/100 (final mark)).
- Student B submits a report which is marked out of 20. The report is submitted three days late. This means that a late penalty of 6 marks will apply ((20 x 0.10 x 3). The report is marked as per normal out of 20 and is given a mark of 15/20, and then the late penalty is applied. The result is that the student receives a final mark of 9/20 for the report (15 (original mark) – 6 marks (late penalty) = 9/20 (final mark)).

No marks will be awarded for work submitted after the assessment has been returned to the students (except where a particular assessment task is undertaken by students at different times throughout the session, but where the assessment is based on experiments or case studies specific to a student). Notwithstanding this, students must complete all assessment tasks to a satisfactory standard and submit them, regardless of lateness or loss of marks, where submission is a condition of satisfactorily completing the subject.

Supplementary Assessments
This subject has been identified as unsuitable for supplementary assessment, and no supplementary assessment will be offered.

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.

Some of the policies below may not be required. If it is highlighted in yellow could you please delete if it is not required.

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>20160128</td>
<td>Dr Wilford Lie</td>
<td>Mrs Sonia Losinno ADE Nominee</td>
<td>Final CHEM218 Autumn 2016 Subject Outline</td>
</tr>
</tbody>
</table>