



UNIVERSITY
OF TASMANIA

School of Chemistry
Faculty of Science, Engineering & Technology

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KRA407: Honours in Chemistry

Unit Outline, 2009

The latest version of this unit outline is available on the web at <http://www.chem.utas.edu.au/teaching/units.html>
(This version updated: 11/3/09)

Unit coordinator:
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Unit summary

Unit code	KRA407
Unit title	Honours in Chemistry
Unit description	This unit is intended to round out your training in Organic Chemistry and the application to synthesis of organic molecules.
Teaching staff	Dr Michael Gardiner, Prof Brian Yates, Dr Robert Shellie, 2 x Visiting Lectures (TBA)
Campus & mode	Hobart, internal
Unit weight	100%
Teaching pattern	5 lecture courses, 2 seminars, research thesis
Prerequisites	BSc, Major in Chemistry
Mutual exclusions	none
Assessment	Thesis 55%, coursework 40%, oral presentation 5%
Required texts, etc	None
Recommended texts	As specified by individual lecturers.

Learning outcomes

On completion of this unit, you should be able to:

- Conduct independent research
- Design appropriate experiments required to test a hypothesis
- Analyse research data
- Communicate research data and results in both oral and written forms

Details of teaching arrangements

Lectures

Chemometric and Experimental Design	Dr Robert Shellie
Topics in Computational Chemistry	Prof Brian F Yates
Supramolecular Chemistry	Dr Michael G Gardiner
Dionex Lectures	TBA
Tasmanian Alkaloids Lectures	Prof John Bremner (Uni of Wollongong)

Lecture times: TBA (these will be determined in consultation with the individual lectures)

and locations

Seminars Attendance at School of Chemistry seminars (Wednesday 12 noon in Lecture Theatre Chem329, C2) is expected.
Library Seminar

Learning expectations

The University is committed to high standards of professional conduct in all activities, and holds its commitment and responsibilities to its students as being of paramount importance. Likewise, it holds expectations about the responsibilities students have as they pursue their studies within the special environment the University offers.

The University's Code of Conduct for Teaching and Learning states:

Students are expected to participate actively and positively in the teaching/learning environment. They must attend classes when and as required, strive to maintain steady progress within the subject or unit framework, comply with workload expectations, and submit required work on time.

Assessment details

- Coursework (40%)** The 4 lecture courses will be assessed either by examination or by assignments or a mixture of both. This will be set at the start of the lecture course. A grade of HD, DN, CR, PP or NN will be awarded for each course. An ungraded pass (UP) will be awarded for the successful completion of the Chemometrics and Experimental Design course.
- Seminars (5%)** Of the two seminars only the final research seminar will be assessed. Students will be marked on: presentation (20%), slides (10%), content (30%), understanding (20%), questions (10%).
- Thesis (55%)** The research thesis will be marked by two members of academic staff and the research supervisor. A short oral interview will also be held after the submission of the research thesis. The assessor will mark the thesis, including the oral interview, on- content 50%, understanding 30%, presentation 20%.

The supervisor will assess the research component of the thesis on the following- knowledge of subject, research skills, organisational skills and ability to present research results.

Specific attendance/performance requirements

In order to pass this unit students must achieve a minimum of 45% in both the coursework and research thesis components.

How your final result is determined

From time to time, it may be necessary to re-scale marks to allow for what is determined to be either a relatively tough or easy assessment task compared with previous years. The procedure for this is governed by the Faculty

policy available on the web at http://fcms.its.utas.edu.au/files/policies/Operational_guide4.pdf. Final grades are determined in accordance with Faculty policy which is also available on the web at http://fcms.its.utas.edu.au/files/policies/Operational_guide5.pdf.

Submission of assignments and reports

Lecturers will provide details of when and where assignments are due to be submitted. The submission for the research thesis is 2:00pm the 3rd of November, 2009. A signed cover sheet is required for every assignment or written material and prac report (see the statement on plagiarism in this handout). The cover sheets will be available from the lecturer or from www.utas.edu.au/plagiarism.

An electronic version of your thesis (word file: excluding spectra, lab diary, other attachments etc) must be submitted along with the full hard copy of the thesis for the purpose of examining with the plagiarism detection software *TurnItIn* (<http://www.utas.edu.au/tl/supporting/academicintegrity/software.html>). This software cross-references the reports with previously submitted theses, web-based material, textbooks and the scientific literature for correct referencing/copying from previously submitted work.

Requests for extensions

Applications for extensions due to extenuating circumstances (such as a medical condition) are required **before the due date of the work** and should be made known to the topic lecturer (for assignments) or the honours coordinator as soon as practicable. Students without a medical certificate for absence will be assumed to have scored zero for the assessment materials not submitted.

Penalties

A penalty of 10% of the actual mark will be imposed for each **working day** that an assignment or the thesis is late. For example, if a student submits an assignment 3 days late and the work is assessed at 70% (without penalty), the mark would then be adjusted to $70 - (3 \times 0.1 \times 70) = 49\%$

Review of results and appeals

All students may have their results reviewed in accordance with the Faculty policy available on the web at http://fcms.its.utas.edu.au/files/policies/Operational_guide6.pdf.

Academic referencing

In your written work you will need to support your ideas by referring to scholarly literature, works of art and/or inventions. It is important that you understand how to correctly refer to the work of others and maintain academic integrity.

Failure to appropriately acknowledge the ideas of others constitutes academic dishonesty (plagiarism), a matter considered by the University of Tasmania as a serious offence.

The appropriate referencing style for this unit is that used by either the *Australian Journal of Chemistry* or the *Journal of the American Chemical Society*.

Plagiarism

Plagiarism is a form of cheating. It is taking and using someone else's thoughts, writings or inventions and representing them as your own; for example, using an author's words without putting them in quotation marks and citing the source, using an author's ideas without proper acknowledgment and citation, or copying another student's work.

If you have any doubts about how to refer to the work of others in your assignments, please consult your lecturer or tutor for relevant referencing guidelines, and the academic integrity resources on the web at <http://www.utas.edu.au/tl/supporting/academicintegrity/index.html>. The intentional copying of someone else's work as one's own is a serious offence punishable by a range of penalties that may range from a fine or deduction/cancellation of marks to, in the most serious of cases, exclusion from a unit, a course, or the University. Details of penalties that can be imposed are available in the Ordinance of Student Discipline – Part 3 Academic Misconduct, see <http://www.utas.edu.au/universitycouncil/legislation/ord9.pdf>.

The University reserves the right to submit assignments to plagiarism detection software, and might then retain a copy of the assignment on its database for the purpose of future plagiarism checking.

For further information and referencing guidelines, see <http://www.utas.edu.au/plagiarism/>.

Each time that you submit an assignment or laboratory report you are required to accompany it with a signed declaration that all the material is your own work except where there is clear acknowledgement or reference to the work of others and that you are aware of the University's plagiarism policy.

Unit evaluation and student feedback

The School of Chemistry is an active participant in the Student Evaluation of Teaching and Learning (SETL) program and the unit will be evaluated towards the end of the Semester. As a result of previous SETL feedback we have, for example, outlined the assessment criteria for the oral assessment. As well as SETL, you should not hesitate to approach the Unit Coordinator or lecturer concerned if you have any problems during the year. Any difficulties may also be raised with the Chemistry Club, which arranges regular meetings between student representatives and the Head of the School.

Staff contacts and responsibilities

Enquiries regarding the course should be directed to the unit coordinator in the first instance. However, students are welcome to discuss particular problems with the Head of School, A/Prof Brian Yates (Brian.Yates@utas.edu.au). There is also a "suggestion box" available in the foyer of the chemistry building for constructive, confidential comments.

Staff member	room	responsibilities	contact
Dr Jason Smith	435	Unit coordinator	6226 2182 Jason.Smith@utas.edu.au
Dr Michael Gardiner	304	Lectures – Supramolecular Chemistry	6226 2404 Michael.Gardiner@utas.edu.au
Prof Brian Yates	204	Lectures - –Topics in Computational Chemistry	6226 2167 Brian.Yates@utas.edu.au
Dr Robert Shellie	411	Lectures - –Topics in Experimental Design	6226 7656 Robert.Shellie@utas.edu.au

Further information and assistance

If you are experiencing difficulties with your studies or assignments, have personal or life planning issues, disability or illness which may affect your course of study, you are advised to raise these with your lecturer in the first instance.

There is a range of University-wide support services available to you including Student Services, International Services and Learning Development. Please refer to the Current Students homepage at: <http://www.utas.edu.au/students/>.

Should you require assistance in accessing the Library visit their website for more information at <http://www.utas.edu.au/library/>.

The University aims to ensure that your time here is enjoyable and rewarding. However if you have a concern or complaint that is affecting your study, the University has created a web page (http://www.admin.utas.edu.au/ac_serv/complaints_info.html) to offer you guidance on solving these problems. Most issues can be resolved informally and therefore you are encouraged to discuss the matter with the person involved as a first step. The web page deals primarily with complaints concerning assessment and academic progress; however advice on who to contact concerning complaints about non-academic issues is also included.

Electronic resources

School of Chemistry home page
School of Chemistry safety page
University's Vista site
University Handbook entry

<http://www.utas.edu.au/chem/>
<http://www.chem.utas.edu.au/safety/>
<http://vista.utas.edu.au/>
<http://www.utas.edu.au/units/KRA407>

Unit Schedule (note this is a guide and dates and times may change)

Week	Week Starting	Monday	Tuesday	Wednesday	Thursday	Friday	Week	Week Starting	Monday	Tuesday	Wednesday	Thursday	Friday
1	9 Feb		Start Date		Expt Design lectures start	Safety Training day	21	30 June					
2	16 Feb						22	6 July					
3	23 Feb						23	13 July					
4	2 March						24	27 July					
5	9 March	Yates Lectures Start (approx)				Research outline due	25	3 August					
6	16 March						26	10 August					
7	23 March						27	17 August					
8	30 March	Macrocyclic start (TBA)					28	24 August					
9	6 April						29	31 August					
10	13 April						30	7 Sept					
11	20 April						31	14 Sept					
12	27 April			Seminar?			32	21 Sept					
13	4 May						33	28 Sept					
14	11 May	Tas Alk Lectures					34	5 Oct					
15	18 May						35	12 Oct			Final Seminar		
16	25 May						36	19 Oct					
17	1 June						37	26 Oct					
18	8 June						38	2 Nov		Thesis Hand In			
19	15 June						39	9 Nov					Oral Interviews
20	22 June						40	16 Nov					Thesis final