JAMES COOK UNIVERSITY

School of Pharmacy and Molecular Sciences
Faculty of Medicine, Health & Molecular Sciences
Department of Chemistry

COURSE TITLE: CH3041:03 Environmental Chemistry

SUBJECT CO-ORDINATOR AND TEACHING STAFF: Dr Mike Liddell
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CONSULTATION TIMES: Room E1.102B 12-1pm

LECTURE TIMES:	Tuesday	9:00	Room B1.124
	Tuesday	10:00	Room B1.124
	Thursday	9:00	Room E1.024
TUTORIALS:	Tuesday	14:00	Room E1.024
PRACTICALS:	Thursday	13:00	Room E1.113

PRACTICALS: 3 hours laboratory per week over the semester, 9 laboratory practicals and 3 field trips. *Students should obtain copies of the CH3041 Practical and Report Books from the Faculty Office.* The CH3041 Laboratory manuals and report books are available as read-only Word files on the LearnJCU WEB site. It will be a lot cheaper to purchase these from the Science Faculty office rather than to try printing them out yourself. A refundable breakage deposit of $20 must be paid in Week1 of the semester. Refunds of the breakage deposits will occur after the last week of semester and for 4 weeks past this date. Supervisor: Dr M. Liddell

PRACTICAL REPORTS AND AURALS: The reports are to be lodged in the Chemistry box by the due day indicated in the laboratory manual. A 10% penalty will apply for each day the report is late. All practical reports will be marked and returned to students within 2 weeks of submission. The aural reports will be presented a week after the practical during the agreed time slot. Where a student is absent from a practical and has a valid medical certificate the marks will be entered with due proportionality.

MEDICAL CERTIFICATES: These must be submitted to your practical demonstrator within one week of returning to classes.

ATTENDANCE: Students must participate and complete the assessment in all practical exercises unless a valid medical certificate is presented as soon after the practical session as is possible. Attendance at >80% of the practicals is required to pass the subject. Attendance at tutorials is optional but students will find it be helpful.

EXAMINATIONS: Supplementary examinations are not offered in this subject as with other BSc subjects. Deferred examinations may be awarded on presentation of a medical certificate within one week of the examination date.

LEARNING OBJECTIVES: This course aims to provide an understanding of basic environmental chemical principles and their relevance to the natural and applied sciences. Practical skills will be developed that are relevant to chemical monitoring in the environment.

REFERENCE MATERIALS:
Recommended text :

"*ENVIRONMENTAL CHEMISTRY*"- 3rd edition, C. Baird, M. Cann (2005)

CH3041 WEB site: http://learnjcu.jcu.edu.au/CH3041

Additional text :

"*INTRODUCTION TO ENVIRONMENTAL CHEMISTRY*", 2nd edition
J.E. Andrews, P. Brimblecombe, T.D. Jickells and P.S. Liss
(Blackwell Science, 2004)

PLAGIARISM: Plagiarisms - the act of taking and using another's work as one's own. It includes doing the following without the due acknowledgment or clear indication of origin- directly copying any part of any else's work, using very close paraphrasing or summarising of another's work, using or developing an idea or thesis derived from another's work, using the experimental results that have been obtained by someone else. An act of plagiarism is a form of academic misconduct, along with activities like- the fabrication of data, claiming results where none has been obtained, the falsification of data, including changing records or preferentially rejecting results, for example where they do not support a research hypothesis, misleading ascription of authorship. Acts of plagiarism will be penalised by the award of no marks for a particular assignment or practical.

WORKLOAD: It is expected that students should on average spend 10 hours per week on this subject. This is inclusive of class contact time.

DISABILITIES : Students with a disability and who require special arrangements or consideration should contact the Disability Resources Officer in the Equal Opportunity Unit which is housed on the ground floor of the JCU Library. They can also be contacted by phone – ext 5152.

PREPARATION: At least one first year Chemistry subject (CH1011 or equivalent) and preferably either CH1010 and/or CH1012.

COURSE CONTENT: Lectures (36) assisted by tutorials(9). The subject description in the Calendar gives details of the actual content covered.

ASSESSMENT:

Theory	- 37%:	A 2-hour examination in November.
Practical	- 25%:	Continually assessed during the semester
Test	- 16%:	late in the semester
Essay	- 17%:	**29 / 10 / 2007 – NO EXTENSIONS**
Tutorials	- 5%:	Continually assessed during the semester

GRADUATE ATTRIBUTES

Graduate attributes are divided into generic skills and graduate qualities. As graduate qualities are not easily amenable to assessment on a subject-by-subject basis only the generic skills are mapped in this document. In the table below the extent to which each of the generic skills are covered in this subject is listed.

GENERIC SKILLS	**Rating 0-3**
Literacy and Numeracy	
Ability to critically read demanding texts	3
Ability to speak and write clearly	2
Ability to generate, interpret numerical information	2
Information Literacy	
Ability to access information	2
Ability to evaluate information	2
Understanding of legal, ethical social issues relating to information	1
Ability to select, organise and cogently communicate information	2
Critical thinking and problem solving	
Ability to think critically, evaluate claims, deploy evidence	2
Ability to adapt knowledge to new situations	2
Ability to deploy information to practical ends	2
Ability to define and solve problems in at least one discipline area	2
Self reliance and interpersonal understanding	
Ability to communicate effectively with a range of audiences	1
Ability to lead, manage and contribute to teams	
Ability to work with people of differing age, gender etc	2
Ability to work individually and independently	2
Using tools and technologies	
Ability to select and use appropriate tools and technologies	2
Ability to use online technologies effectively and ethically	1
Learning achievement	
Acquisition of skills.. from one discipline area	3
Ability to reflect on and evaluate learning	1
Ability to manage future career and personal development	1

Score: 0 = not covered significantly, 1 = covered peripherally, 2 = covered significantly, but not a primary focus, 3= a major focus of the subject.