



Course specification

Description: Chemistry An Introductory Course

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
TPP	7150	54014	2, 2006	EXT	1.00	Toowoomba

Academic group:	LTSUN
Academic org:	LTSUNT
Student contribution band:	2
ASCED code:	010599

STAFFING

Examiner: Lorna Douglas

Moderator: Tas Bedford

RATIONALE

This course is intended for students who wish to study a tertiary science or engineering course, and who do not feel confident about their knowledge of chemistry. It assumes no prior knowledge of chemistry and is therefore suitable for students who have never studied chemistry, or who have only a weak background in chemistry.

SYNOPSIS

The course includes a consideration of the nature of matter and energy, atomic structure and its relationship with chemical properties, chemical formulae and equations, common types of chemical reactions, and an introduction to chemical calculations involving the mole concept and the concentration of solutions.

OBJECTIVES

In the process of successful completion of this unit, students will be able to:

1. effectively communicate their understanding of chemistry concepts required for tertiary study of science or engineering.
2. demonstrate an attitude of critical inquiry and as well as apply analytical and problem-solving skills to a range of problems;
3. demonstrate an understanding of the chemistry concepts in this course through a variety of applications in the real world.

TOPICS

Description	Weighting (%)
1. Introductory concepts: Measurement and Calculations in Chemistry	10.00

2.	Matter and energy	10.00
3.	Atoms, elements and the Periodic table	10.00
4.	Chemical formulae and equations	15.00
5.	Moles and Molarity	15.00
6.	Common types of chemical reactions	20.00
7.	Stoichiometry	20.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

All study materials are supplied as part of the course.

Cracolice, M & Peters, E 2004, *Introductory chemistry - an active learning approach*, 2nd edn, Brooks/Cole Thompson Learning, Belmont, California.

(Students will need to acquire a non-programmable scientific calculator.)

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

A list of recommended websites is included in the Introductory Book.

ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
LEARNING DIARY	0.00	0.00	24 Jul 2006 (see note 1)
ASSIGNMENT 1	20.00	4.00	28 Jul 2006
ASSIGNMENT 2	40.00	8.00	18 Aug 2006
ASSIGNMENT 3	60.00	12.00	15 Sep 2006
ASSIGNMENT 4	40.00	8.00	29 Sep 2006
ASSIGNMENT 5	40.00	8.00	20 Oct 2006
END OF SEMESTER EXAM 3 HOURS	80.00	60.00	END S2

NOTES

1. Diary is to be handed in with each assignment on the assignment due date.

IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:

There are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

- 2 Requirements for students to complete each assessment item satisfactorily:
To complete the assignments satisfactorily, students must obtain at least 45% of the marks allocated for each assignment and 50% of the total weighted marks allocated for the assignments overall. To complete the examination satisfactorily, students must obtain at least 50% of the marks available for the examination.
- 3 Penalties for late submission of required work:
Students are strongly encouraged to discuss any problems with the lecturer regarding their ability to submit assignments on time. Failure to do so may attract a penalty of 5% of the total marks available for the assignment for each working day late.
- 4 Requirements for student to be awarded a passing grade in the course:
Students who do not qualify for a Passing grade may, at the discretion of the Examiner, be awarded a Supplementary Examination and/or assigned additional work to demonstrate to the Examiner that they have achieved the required standard.
- 5 Method used to combine assessment results to attain final grade:
The final grades for students will be assigned on the basis of the weighted aggregate of the marks obtained for each of the summative assessment items in the course.
- 6 Examination information:
Only non-programmable calculators are allowed. A Periodic Table is provided in the examination booklet.
- 7 Examination period when Deferred/Supplementary examinations will be held:
Any Deferred or Supplementary examinations for this course will be held during the next examination period.
- 8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

ASSESSMENT NOTES

- 1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 2 Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner.
- 3 In accordance with University policy, the Examiner may grant an extension of the due date of an assignment in extenuating circumstances.
- 4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 5 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 6 In the event that a due date for an assignment falls on a local public holiday in their areas, such as a Show holiday, the due date for the assignment will be the next day.

Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.

- 7 Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non directed personal study.
- 8 Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time, may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

OTHER REQUIREMENTS

- 1 Students should have a very sound knowledge of Mathematics Level A or equivalent.
 - 2 The time it will take to complete this course will vary and depends on your previous study experience.
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