Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Carolyn Munce</td>
<td><a href="mailto:carolyn.munce@staff.qibt.qld.edu.au">carolyn.munce@staff.qibt.qld.edu.au</a></td>
</tr>
</tbody>
</table>

Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the QIBT Portal under the “myTimetable” link.

Prerequisites

Please note: 1101BPS is a prerequisite for courses 1104BPS and 1002BPS. This means that you need to achieve a Pass or above to progress to these courses.

Brief Course Description

This course introduces the fundamental concepts and methods of general chemistry. Basic skills of laboratory chemical analysis are developed.

Lecture contents include four units:

1. Introduction and basic concepts
2. Molecular structure and bonding
3. Energy and physical processes

Rationale

The purpose of this course is to introduce you to the study of matter and its interactions. The course is designed to provide you the chemical foundation required for further studies in a range of scientific or engineering courses.

Aims

Chemistry involves study of the properties and behaviour of matter and energy. Matter is defined as anything that has mass and occupies space. It has been shown that all the matter in our universe arises due the combination of about 100 basic substances called elements, and the elements themselves are made of smaller units called atoms. Energy is a measure of capacity to change and is fundamental to understanding the behaviour of matter. Central themes in the course include how matter and its properties can be described in terms of macroscopic terms and the kinetic-molecular theory of matter. The course provides knowledge fundamental to other courses with chemistry requirements.

The aim of the course is to introduce students to the basic principles and applications of chemistry, as well as basic chemical laboratory skills; to encourage students to apply the knowledge and skills gained to practical situations in practical situations in the chemical, biological and physical sciences; and to provide knowledge and skills fundamental to other courses with chemistry requirements.
Learning Outcomes

Upon successful completion of this course students will be able to...

1. Understand the basic principles of chemistry;
2. Perform simple experimental procedures and apply workplace health and safety practices in the chemical laboratory;
3. Solve problems in the pure and applied chemical sciences
4. Undertake other courses at University that require an understanding of chemistry.

Texts and Supporting Materials

Blackman, Bottle, Schmid, Mocerino and Willie (2012), Chemistry 2nd ed., John Wiley & Sons, Australia (this text will also be used for Chemistry B)

1021SCG Chemistry A Laboratory Manual available from Coop bookstore, Mt Gravatt campus.

Content from each week's lecture will be available on the portal.

Organisation and Teaching Strategies

The teaching and assessment portion of the semester is of 14 weeks duration - inclusive. Classes are usually provided in one (2) hour block and one three (3) hour block during each of the first thirteen (13) weeks of semester. For each of Weeks 1-13 you are expected to attend the entire teaching session each week.

A) Three [3] hours will be spent during class time each week presenting and discussing concepts and techniques that you need to know to pass the course.

B) Two [2] hours of class time will also be spent each week undertaking chemistry tutorials.

In weeks 3, 5, 7, 9, and 11, you will have a four [4] hour laboratory class

These laboratory sessions will be held on the Nathan campus of Griffith University, N44_3.16A- attendance and participation in all 5 laboratory classes is a requirement for achieving a pass in this subject. Further details will be provided during class time.

Where class times conflict with Public Holidays, makeup classes may be organised on a different day. You are advised to make inquiries about these Public Holidays to determine when the relevant class will be held. Further time is made available for individual consultation with teaching staff each week [see myTimetables>Consultation for further details].

Class Contact Summary

Attendance
Your attendance in class will be marked twice during a four hour class. To receive full attendance, you must be present in the classroom on both occasions. Therefore, you are encouraged to attend and participate in all classes throughout the semester.

Participation in Class
You are expected to actively participate in classes each week.

Consultant Times
Attendance during consultation times is optional but you are encouraged to use this extra help to improve your learning outcomes.

Course Materials
Before attending the weekly lectures, you are expected to prepare in advance for each of these classes by pre-reading the lecture notes and the relevant chapters in the textbook.

Laboratory Sessions
You are expected to be fully prepared for the laboratory classes by reading through the relevant chapters in the laboratory manual, familiarising with the laboratory procedures and wearing a laboratory coat, safety glasses and proper shoes that enclose the whole foot.

You are required to purchase a copy of the laboratory manual, a laboratory coat and safety glasses.

You are also required to complete an online laboratory induction through learning@griffith prior to the first laboratory session.

It is important that you arrive prepared for your laboratory session and are ready to start at the time given in the timetable. If you arrive more than 10 min after the laboratory starting time or if you are wearing incorrect footwear, you may not be permitted to undertake the experiment for that day and if so, will be marked absent for the full 4 hours.

Independent Learning
You are also expected to undertake a minimum of 6-7 hours each week (in addition to the 4 hours of contact time) in undertaking learning and project activities related to this course.

Program Progression
You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80% and that GPA is maintained at equal to or greater than 3.5 [please see QIBT Policy Library-> Program progression Policy - for more information].

Content Schedule

The following topics will be covered throughout the semester:

Weekly Teaching Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Activity</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course introduction. Basic Concepts: Matter-atoms, molecules, and ions.</td>
<td>Lecture</td>
<td>Textbook Chapter 1-2.1</td>
</tr>
<tr>
<td></td>
<td>Basic skills for Chemistry</td>
<td>Workshop</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Basic Concepts: The language of chemistry, measurement, chemical equations.</td>
<td>Lecture</td>
<td>Textbook chapter 2.1-3.2</td>
</tr>
<tr>
<td></td>
<td>Matter, atoms and molecules</td>
<td>Tutorial</td>
<td>Tutorial number 1</td>
</tr>
<tr>
<td>3</td>
<td>Basic Concepts: Chemical reactions and stoichiometry</td>
<td>Lecture</td>
<td>Textbook chapter 3.3-3.5</td>
</tr>
<tr>
<td>Item</td>
<td>Assessment Task</td>
<td>Weighting</td>
<td>Relevant Learning Outcomes</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Mid Semester Exam</td>
<td>20%</td>
<td>1,3,4</td>
</tr>
<tr>
<td>2</td>
<td>Laboratory Reports</td>
<td>25%</td>
<td>2,3,4</td>
</tr>
<tr>
<td></td>
<td>- Students must pass this assessment with a mark of at least 17 out of 25 to pass the course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Weekly Quizzes</td>
<td>10%</td>
<td>1,3,4</td>
</tr>
<tr>
<td>4</td>
<td>Final Exam</td>
<td>45%</td>
<td>1,3,4</td>
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</tbody>
</table>

**Assessment Details**

The assessment for this course consists of weekly in-class tests, two examinations and a set of laboratory reports.

The weekly in-class tests will be held each week starting in week 2 and will be based on the previous week's content. Marks from only five (5) of the weekly tests will be included in the final grade.

The examinations will be in the form of a closed book written examination. A non-programmable calculator is essential. Laboratory reports consist of completing relevant
sections in the laboratory manual.

Examinations will test your understanding of the relevant course materials and problem solving skills. The questions will be marked against standard solutions. The mid-semester examination will cover course material from weeks 1-6.

The final examination will cover course material from weeks 1-13, but there will be an emphasis on weeks 7-13.

Laboratory reports will develop your scientific reporting skills and will contain questions that test your understanding of chemistry principles and laboratory skills of the practicals. **ATTENDANCE AND ADEQUATE PERFORMANCE AT EACH LABORATORY CLASS IS ESSENTIAL TO PASS THE COURSE.**

The laboratory component is graded by continuous assessment of the laboratory experiments and contributes 25% to the final mark. All experiments are compulsory and satisfactory attendance and performance is required for successful completion of the course.

Submission and Return of Assessment Items

Examination papers will not be returned. Marked laboratory reports will be distributed in the laboratory classes.

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Extensions

To apply for an extension of time for an assessment item you must submit a written request to your lecturer via the Student Website at least 48 hours before the date the assessment item is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. medical certificate]. Please refer to the QIBT website - Policy Library - for guidelines regarding extensions and deferred assessment.

Penalties for late submission without an approved extension

Penalties apply to assignments that are submitted after the due date without an approved extension. Assessment submitted after the due date will be penalised 10% of the TOTAL marks available for assessment (not the mark awarded) for each day the assessment is late. Assessment submitted more than five days late will be awarded a mark of zero (0) For example:

- > 5 minutes and <= 24 hours 10%
- > 24 hours and <= 48 hours 20%
- > 48 hours and <= 72 hours 30%
- > 72 hours and <= 96 hours 40%
- > 96 hours and <= 120 hours 50%
- > 120 hours 100%

Note:

- Two day weekends will count as one day in the calculation of a penalty for late submission.
- When a public holiday falls immediately before or after a weekend, the three days will count as one day in the calculation of a penalty for late submission.
- When two public holidays (e.g. Easter), fall immediately before or after, or one day either side of a weekend, the four days will count as two days in calculating the penalty for late submission.
- When a single public holiday falls mid-week, the day will not be counted towards the calculation of a penalty.

Please refer to the QIBT website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

Assessment Feedback

Marks awarded for assessment items will also be available on the on-line grades system on the Student Website within fourteen [14] days of the due date.

Generic Skills

QIBT aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

<table>
<thead>
<tr>
<th>Generic Skills</th>
<th>Taught</th>
<th>Practised</th>
<th>Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oral Communication</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Information Literacy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Secondary Research</td>
<td></td>
<td></td>
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<tr>
<td>Critical and Innovative Thinking</td>
<td></td>
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<tr>
<td>Academic Integrity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self Directed Learning</td>
<td></td>
<td></td>
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<tr>
<td>Team Work</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Intelligence</td>
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<td></td>
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</tbody>
</table>
### English Language Proficiency

### Additional Course Generic Skills

<table>
<thead>
<tr>
<th>Specific Skills</th>
<th>Taught</th>
<th>Practised</th>
<th>Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical laboratory skills</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Additional Course Information

In addition to formal contact hours, you are provided with extra support through individual consultation with lecturers, English language support, and self-access computer laboratories.

**Teacher and Course Evaluations**

Students commented that the assessment items, tutorial activity and teacher’s approach were positive in supporting their learning. Students particularly appreciate the examples given during lectures and the opportunity to practice calculation problems. This practice will continue to be advanced with more examples and opportunity for students to participate in lectures.

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via QIBT’s online evaluation tool whenever these are available.

### Academic Integrity

QIBT is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual’s and the College’s reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, pre-meditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, QIBT also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at QIBT, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity, however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

Please ensure that you are familiar with the [QIBT Academic Integrity Policy](#); this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Academic Integrity Policy on the QIBT website – Policy Library.

### Risk Assessment Statement

This course follows QIBT and Griffith University Workplace Health and Safety Laboratory guidelines.

The aim of workplace health and safety is to make sure that people do not get sick or injured at the workplace. The legislation dealing with this in Queensland is called the Workplace Health and Safety Act, 1995. Anyone who can affect workplace health and safety has an obligation under this Act.

As a student, you have an obligation to yourself and others to undertake activities in a safe manner. You must follow instructions which are provided for safety. You must not put yourself or anyone else at risk. Care especially needs to be taken when you are performing activities which can affect others.

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Note: For all Diploma level programs, QIBT acknowledges content derived from Griffith University.