UNSW Course Outline

CHEM7001 Chemical Safety & Legislation - 2024

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General Course Information

Course Code : CHEM7001
Year : 2024
Term : Term 1
Teaching Period : T1
Is a multi-term course? : No
Faculty : Faculty of Science
Academic Unit : School of Chemistry
Delivery Mode : Online
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

An understanding of workplace safety issues is important for anyone pursuing a career in the chemical industry. This course explores the legal frameworks, current methodologies and issues of best practice in the risk minimisation and management of workplace hazards. The subject

uses a variety of media in online delivery of course materials and assessment, including recorded lectures, websites, videos and documented case studies. It is anticipated that students will gain an appreciation of current legislation and codes of practice, identify different types of chemical workplace hazards and be able to apply risk management to workplace hazards.

Course Aims

The aim of this course is to provide an understanding of codes of practice and legislative requirements for the handling and use of potentially dangerous chemical goods. This is essential for anyone working in the chemical industry or in academic chemistry research. This course will equip students with the basic safety, regulatory and legislative knowledge required when working in a laboratory setting within the Australian chemical workplace, enabling them to fully integrate into the modern workplace.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe and evaluate the requirements and foundations of workplace safety legislation, and identify and implement elements of best practice in workplace safety.
CLO2 : Locate and interpret relevant information related to occupational health and safety, and safety legislations to a given scenario.
CLO3 : Identify, manage and critically evaluate chemical hazards and risks in the workplace by performing relevant safety inspections.
CLO4 : Identify and differentiate different classes of chemical waste, and describe proper methods for chemical disposal.

Course Learning Outcomes	Assessment Item
CLO1 : Describe and evaluate the requirements and foundations of workplace safety legislation, and identify and implement elements of best practice in workplace safety.	• Risk assessment and safe work procedure • Quizzes
CLO2 : Locate and interpret relevant information related to occupational health and safety, and safety legislations to a given scenario.	• Case Study • Risk assessment and safe work procedure • Quizzes
CLO3 : Identify, manage and critically evaluate chemical hazards and risks in the workplace by performing relevant safety inspections.	• Case Study • Risk assessment and safe work procedure
CLO4 : Identify and differentiate different classes of chemical waste, and describe proper methods for chemical disposal.	• Case Study • Quizzes • Risk assessment and safe work procedure

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Risk assessment and safe work procedure Assessment Format: Individual	40%	Due Date: Week 10: 15 April - 21 April
Case Study Assessment Format: Individual	30%	Due Date: Week 7: 25 March - 31 March
Quizzes Assessment Format: Individual	30%	Due Date: Weekly

Assessment Details

Risk assessment and safe work procedure

Assessment Overview

You will be required to prepare a safety audit of your work place or relevant chemistry laboratory in a real world evidence-based study that brings the course content into practice.

Successful completion of this task will include the submission of an accurate inspection of the workplace in line current legislation and regulatory requirements using the template provided.

Submission of this task is due in week 10, with feedback provided within 2 weeks. This task will be submitted through Moodle.

Course Learning Outcomes

- CLO1 : Describe and evaluate the requirements and foundations of workplace safety legislation, and identify and implement elements of best practice in workplace safety.
- CLO2 : Locate and interpret relevant information related to occupational health and safety, and safety legislations to a given scenario.
- CLO3 : Identify, manage and critically evaluate chemical hazards and risks in the workplace by performing relevant safety inspections.
- CLO4 : Identify and differentiate different classes of chemical waste, and describe proper methods for chemical disposal.

Detailed Assessment Description

Students will be required to prepare a risk assessment and safe work procedure for a

hypothetical high-risk chemistry experiment.

Students will be required to achieve a satisfactory grade in order to pass this component.

Case Study

Assessment Overview

You will be provided with a relevant chemistry-based activity such as a chemical reaction or procedure and will be challenged to identify risks and hazards and how they will be appropriately managed in light of current legislation and best practice.

Feedback will be provided within 1 week of submission, and is due in week 7. This task will be submitted through Moodle.

Course Learning Outcomes

- CLO2 : Locate and interpret relevant information related to occupational health and safety, and safety legislations to a given scenario.
- CLO3 : Identify, manage and critically evaluate chemical hazards and risks in the workplace by performing relevant safety inspections.
- CLO4 : Identify and differentiate different classes of chemical waste, and describe proper methods for chemical disposal.

Detailed Assessment Description

Students are to provide a short report on a major chemical industry accident that brought about major changes to regulation/legislation that benefited consumers, the environment and industry. For this assignment, students will be given a number of topics to choose from, one of which we have identified to be the 1976 Seveso disaster which prompted the introduction of the *Seveso Directive*.

Students will be required to achieve a satisfactory grade in order to pass this component.

Quizzes

Assessment Overview

You will be required to complete three online Moodle quizzes throughout the term (wks. 4, 7 & 10). They will consist of multiple choice questions and each quiz carries an equal weight (10% each). The aim of the quizzes is to promote reflection on your learning and understanding of the course content.

Feedback will be provided to you immediately upon completion of each quiz.

Course Learning Outcomes

- CLO1 : Describe and evaluate the requirements and foundations of workplace safety legislation, and identify and implement elements of best practice in workplace safety.
- CLO2 : Locate and interpret relevant information related to occupational health and safety, and safety legislations to a given scenario.
- CLO4 : Identify and differentiate different classes of chemical waste, and describe proper methods for chemical disposal.

Detailed Assessment Description

At the end of each week, students will be given multiple choice questions to gauge their understanding of course materials.

Students will be required to score 100% to complete each quiz.

General Assessment Information

Grading Basis

Satisfactory

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Topic	Introduction to the Australian chemical safety regulations framework
	Assessment	Quiz 1 due
Week 2 : 19 February - 25 February	Topic	Safety culture
	Assessment	Quiz 2 due
Week 3 : 26 February - 3 March	Topic	Chemical management and safety data sheets
	Assessment	Quiz 3 due
Week 4 : 4 March - 10 March	Topic	Toxic substances and biological agents
	Assessment	Quiz 4 and Assignment 1 due
Week 5 : 11 March - 17 March	Topic	Laboratory hazards
	Assessment	Quiz 5 due
Week 6 : 18 March - 24 March	Other	Flexibility week
Week 7 : 25 March - 31 March	Topic	Risk management
	Assessment	Quiz 6 and Assignment 2 due
Week 8 : 1 April - 7 April	Topic	Minimising risks
	Assessment	Quiz 7 due
Week 9 : 8 April - 14 April	Topic	Chemical waste management
	Assessment	Quiz 8 due
Week 10 : 15 April - 21 April	Topic	Safety and auditing
	Assessment	Quiz 9 and Assignment 3 due

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Jon Beves				By appointment	Yes	Yes

Other Useful Information

Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the UNSW Student Code of Conduct Website.

Academic Honesty and Plagarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.
Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others'

ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.
Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The Current Students site,
- The ELISE training site, and
- The Use of AI for assessments site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct

Submission of Assessment Tasks

Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: https://student.unsw.edu.au/special-consideration

Important note: UNSW has a "fit to sit/submit" rule, which means that if you sit an exam or

submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

Faculty-specific Information

Additional support for students

- The Current Students Gateway
- Student Support
- Academic Skills and Support
- Student Wellbeing, Health and Safety
- Equitable Learning Services
- UNSW IT Service Centre
- Science EDI Student Initiatives, Offerings and Guidelines

School-specific Information

UNSW Changes to Special Consideration: Short Extension

The School of Chemistry has carefully reviewed all of its assessments to determine whether they are suitable for automatic short extensions as set out by the UNSW Short Extension Policy. The current deadline structures for all assessment tasks in the School of Chemistry already accommodate the possibility of unexpected circumstances that may lead students to require additional time for submission. **The School of Chemistry has opted out of the UNSW Short Extension provision for all its courses,** and we have already integrated flexibility into our assessment deadlines. This decision is subject to revision in response to the introduction of new course offerings. All students may still apply for Special Consideration for any assessment via the usual procedures.

School Contact Information

Level 1, Dalton Building (F12)

W: www.chemistry.unsw.edu.au

Also see: ***Contacts and Support*** section of the course Moodle page (where applicable)