### **Pathways and Academic Learning Support Centre**

### **EPPREP 790: Foundation Chemistry**

Callaghan & Ourimbah Summer 2 - 2024

The Pathways and Academic Learning Support Centre recognises and respects the unique history and culture of Aboriginal and Torres Strait Islander peoples and their unbroken relationship with the lands and the waters of Australia over millennia. We are dedicated to reconciliation and to offering opportunities for Aboriginal and Torres Strait Islander peoples to access and succeed in higher education. The Centre is committed to providing a culturally safe and inclusive environment for all.



**Course Description** 

This preparation course is designed for students who have limited prior studies in chemistry and are not confident that their experience is adequate for the requirements of the Open Foundation Chemistry & Life Sciences courses. The course can also be taken as preparation for the course EPPREP940 Introduction to Undergraduate Chemistry for students who intend to enrol in the undergraduate courses CHEM1010 or CHEM1020 and have limited chemistry background.

The course is organised to present fundamental chemical concepts with particular emphasis on problem solving and is a skills based course.

Academic Progress Requirements

Nil

Requisites

This course is only available to domestic students enrolled in NUPrep Bridging and Refresher [22223].

**Contact Hours** 

Lecture

Face to Face On Campus

2 hour(s) per day for 5 day(s) starting Week 1

**Self-Directed Learning** 

Self-Directed

1 hour(s) per day for 5 day(s) starting Week 1

It is expected that you will spend at least one hour per day

practicing skills and consolidating your learning.

**Tutorial** 

Face to Face On Campus

1 hour(s) per day for 5 day(s) starting Week 1

Unit Weighting

Workload Students are required to spend on average 20 hours of effort

(contact and non-contact) including assessments per 5 unit

course.







www.newcastle.edu.au CRICOS Provider 00109J



## **CONTACTS**

**Course Coordinator** Dr Jennifer Irwin

Jennifer.Irwin@newcastle.edu.au

02 43484217

Consultation: Please email to schedule an appointment.

Other teaching staff will be advised on the course Canvas site. **Teaching Staff** 

**School Office** Callaghan Ourimbah

Ground Floor, General Purpose Building (GP) HO 168, Humanities Building

Ph: 02 4921 5558

enabling@newcastle.edu.au

Ph: 02 4348 4076

enabling@newcastle.edu.au

## **SYLLABUS**

**Course Content** 

The course covers:

- scientific notation, measurement, SI units and unit conversions
- 2. atomic structure
- use of chemical formulae 3.
- structure of elements and compounds 4.
- the periodic table and periodic trends
- calculating chemical quantities using the mole 6.
- representation of chemical reactions using balanced chemical equations.

Course Learning **Outcomes** 

#### On successful completion of this course, students will be able to:

- 1. Distinguish between elements, compounds and mixtures
- 2. Outline basic atomic structure
- 3. Explain the structure of the periodic table, distinguish metals, non-metals, liquids and gases
- 4. Write chemical formula and name different classes of compounds
- 5. Use scientific notation, covert SI units and identify significant figures
- 6. Write and balance chemical equations
- 7. Determine molar masses for elements and compounds.

**Course Materials** 

All course materials will be provided on the course Canvas site. Scientific calculator is required. Students are not required to purchase a textbook.

## **ASSESSMENTS**

This course has 5 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Quiz 1	Friday 9 <sup>th</sup> February 11:59pm	Individual	20%	1, 2
2	Quiz 2	Friday 9 <sup>th</sup> February 11:59pm	Individual	20%	2, 3
3	Quiz 3	Friday 9 <sup>th</sup> February 11:59pm	Individual	20%	1, 2, 3, 4
4	Quiz 4	Friday 9 <sup>th</sup> February 11:59pm	Individual	20%	1, 2, 3, 4, 5, 6
5	Quiz 5	Friday 9 <sup>th</sup> February 11:59pm	Individual	20%	1, 2, 3, 5, 6, 7

**Late Submissions** 

Completion of each assessment item is necessary for a pass grade in this course. Extensions of time may be granted in consultation with your Course Coordinator.



### Assessment 1 - Quiz 1

Assessment Type Quiz

**Description** Exercise designed to demonstrate an understanding of matter and basic measurements used

in chemistry

Weighting 20%

**Due Date** Friday 9<sup>th</sup> February 11:59pm

Submission Method Online

Assessment Criteria Correct answers

Return Method Online

Feedback Provided Feedback will be provided in Canvas upon completion of the quiz

#### Assessment 2 - Quiz 2

Assessment Type Quiz

**Description** Exercise designed to demonstrate an understanding of matter and basic measurements used

in chemistry

Weighting 20%

**Due Date** Friday 9<sup>th</sup> February 11:59pm

Submission Method Online

Assessment Criteria Correct answers

Return Method Online

Feedback Provided Feedback will be provided in Canvas upon completion of the quiz

#### Assessment 3 - Quiz 3

Assessment Type Quiz

**Description** Exercise designed to demonstrate an understanding of matter and basic measurements used

in chemistry

Weighting 20%

**Due Date** Friday 9<sup>th</sup> February 11:59pm

Submission Method Online

Assessment Criteria Correct answers

Return Method Online

Feedback Provided Feedback will be provided in Canvas upon completion of the quiz

### Assessment 4 - Quiz 4

Assessment Type Quiz

**Description** Exercise designed to demonstrate an understanding of matter and basic measurements used

in chemistry

Weighting 20%

**Due Date** Friday 9<sup>th</sup> February 11:59pm

Submission Method Online

Assessment Criteria Correct answers

Return Method Online

Feedback Provided Feedback will be provided in Canvas upon completion of the quiz

### Assessment 5 - Quiz 5

Assessment Type Quiz

**Description** Exercise designed to demonstrate an understanding of matter and basic measurements used

in chemistry

Weighting 20%

**Due Date** Friday 9<sup>th</sup> February 11:59pm

Submission Method Online

Assessment Criteria Correct answers

Return Method Online

Feedback Provided Feedback will be provided in Canvas upon completion of the quiz



## ADDITIONAL INFORMATION

#### **Grading Scheme**

This course is graded as follows:

Grade	Description
Ungraded Pass (UP)	There are no marks associated with this result and you have met the level requirements to pass the course.
Fail (FF)	Failure to satisfactorily achieve assessment objectives or compulsory course requirements. A fail grade may also be awarded following disciplinary action.

## Communication Methods

**Email** is the principal form of communication at the university and within this course. Always use your student email (NUmail), rather than a private email address, and check this regularly. As Course Coordinator I will try to respond to your email within three (3) working days. I will not normally respond to emails over the weekends. Please be courteous in your email communication and in the online space. The University of Newcastle has a <u>Code of Conduct</u> that covers all communications in the University for staff and students.

**Canvas** is used to distribute course material, announcements and other information. It is also used for online quizzes and to allow students to track their individual progressive assessment results via Grades.

**Discussions forums** in Canvas can be used to ask questions about minor issues. Students are strongly encouraged to use these to communicate with each other, discuss issues relating to the course, and solve minor problems.

# Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for Adverse Circumstances must be lodged via the online Adverse Circumstances system for all individual assessment items worth 30% or greater by 11:00pm on the day the assessment is due. For assessment items less than 30%, you will need to contact your Course Coordinator by 11:00pm on the due date of the assessment item.

Before applying you must refer to the <u>Adverse Circumstances Affecting Assessment Items</u> <u>Procedure</u> and the <u>Adverse Circumstances Affecting Assessment Items Policy</u>.

Please note that students must submit their adverse circumstances application via the online Adverse Circumstances system by 11:00pm on the due date of the assessment item, even if you are using a Reasonable Adjustment Plan (RAP) as your supporting documentation.

#### **Academic Misconduct**

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. Please refer to the <u>Student Academic Integrity Policy</u>.

# Workplace Health and Safety Requirements

There are no specific WH&S requirements for this course.

# Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the <u>policies and procedures</u> that support a safe and respectful environment at the University.

#### **Course Evaluation**

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

#### **Timetable**

Your timetable for this course is available via the myUni Student Portal and can also be found here.

#### **Software**

Free Microsoft Office software is available to enrolled students <u>here</u> and includes 5 TB of free cloud storage with OneDrive.

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# Written Assessment Word Limits

Word limits for your written assessments includes headings, sub-heading, in-text citations, quotes and referencing but does not include the list of references, appendices and footnotes. You will not receive a penalty for exceeding the word limit (there is a tolerance of up to 10%), but any work after the maximum word limit may not be included within the allocation of marks.

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