Printed: 11 May 2021, 12:53AM

The published on-line version of the Course Profile is the authoritative version and by the publication of the Course Profile on-line the University deems the student has been notified of and read the course requirements.

1. General Course Information

1.1 Course Details

COURSE CODE	2103NSC
COURSE TITLE	Organic Chemistry
ACADEMIC ORGANISATION	ESC School of Environment and Science
TRIMESTER	Trimester 1 2021
MODE	Blended
LEVEL	Undergraduate
LOCATION	Nathan, On Campus
CREDIT POINT VALUE	10

Course Description:

This course covers the structure and chemistry of the fundamental functional groups in used in standard organic synthesis as well as the basic stereochemistry nomenclature routinely used in organic molecules. It then develops to cover basic synthetic organic mechanism and introduces methodologies for the multistep synthesis of small organic molecules. Pre-requisite: 1022SCG (Chemistry 1B) 1024SCG (Chemistry II) Incompatible: 2115SCE Organic Chemistry 2014MSC Organic Chemistry

Assumed Background:

Pre-requisite:
1022SCG (Chemistry 1B)
1024SCG (Chemistry II)

Incompatible:
2115SCE Organic Chemistry
2014MSC Organic Chemistry

1.2 Course Introduction

The course presents material that is fundamental to an understanding of organic chemistry and to further studies in the chemical, biochemical and materials sciences. It covers the chemistry of the principal functional groups, organic stereochemistry, reaction mechanisms and an introduction to synthetic chemistry.

Previous Student Feedback

In 2019, for Q6 of the student SEC 83.4% of students either ‘Strongly Agreed (66.7%)’ or ‘Agreed (16.7%)’ with the statement ‘Overall I am satisfied with the quality of this course’.

1.3 Course Staff

Primary Convenor **APro Todd Houston**

PHONE	x27051
EMAIL	t.houston@griffith.edu.au
CAMPUS	Nathan Campus
BUILDING	Technology (N44)
ROOM	3.25
CONSULTATION	Meetings available by appointment either on campus (if there are no restrictions) or online.
OTHER LOCATION	G25_4.69

Lecturer **Prof Wendy Loughlin**

EMAIL	w.loughlin@griffith.edu.au
CAMPUS	Nathan Campus
BUILDING	Technology (N44)
ROOM	3.21
CONSULTATION	When sending emails, please only use your GU email account and include your full name and student number with your message. I will attempt to reply as quickly as possible. E-mail should be the first point of contact as I have multiple jobs within the University and not always in my N44 office.

1.4 Timetable

Timetables are available on *the Programs and Courses website*.

NB: Details contained in this Section of the course profile and Section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the above link.

Additional Timetable Information

The dates of offer of the small group tutorials vary according to the quiz cycles.

Students will have access to the staff teaching calendar and be notified by L&G announcements and email regarding dates of tutorials.

1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's Lecture Capture Policy.

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

2. Aims, Outcomes & Graduate Attributes

2.1 Course Aims

The course presents material which is basic to an understanding of organic chemistry and to further studies in the chemical and biochemical sciences. The principles of organic chemistry such as essential physical organic chemistry, mechanistic chemistry and a range of synthetic methodologies are presented. Throughout the course the relevance of knowledge of organic chemistry to other scientific disciplines is highlighted. It provides a firm foundation for further studies in organic chemistry, biological and medicinal chemistry and materials science. Laboratory exercises test the students' ability to develop practical skills and to apply chemical knowledge gained from the lecture course to 'real situations'. Problem solving skills in an experimental context are

developed in the laboratory sessions and associated reports.

2.2 Learning Outcomes

After successfully completing this course you should be able to:

1 Produce accurate chemical representations of organic molecules, identify the impact of molecular structure on its physical properties and apply this knowledge and understanding to problem solving in organic chemistry.

2 Apply the principles of organic chemistry such as physical organic chemistry, mechanistic chemistry and a range of synthetic methodologies to a study of chemical reactions and approaches to multistep chemical synthesis.

3 Identify the stereochemical relationship between organic molecules and assign their configuration.

4 Demonstrate problem solving skills in an experimental context through laboratory sessions and associated reports. This will involve identification of unknown organic chemicals based on a variety of analytical methods.

2.3. Graduate Attributes

For further details on the Griffith Graduate please click here

Griffith University prepares influential graduates to be:

- Knowledgeable and skilled, with critical judgement
- Effective communicators and collaborators
- Innovative, creative and entrepreneurial
- Socially responsible and engaged in their communities
- Culturally capable when working with First Australians
- Effective in culturally diverse and international environments

This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.

For further details on the Griffith Graduate Attributes please refer to The Griffith Graduate policy.

University wide attributes

GRADUATE ATTRIBUTE	TAUGHT	PRACTISED	ASSESSED
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Innovative, creative and entrepreneurial	•	•	•

Additional Course Information on Graduate Attributes

Knowledgeable and Skilled in their Disciplines
Innovative and Creative, with Critical Judgement

3. Learning Resources

3.1 Required Resources

Details of your Required Learning Resources are available from the Reading List.

3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the Reading List.

3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students are included below for easy reference.

Readings - New online service enabling students to access Required and Recommended Learning resources. It connects to the library catalogue to assist with quickly locating material held in Griffith libraries and enables students to manage and prioritise their readings, add personal study notes and export citations.

Learning@Griffith - there is a dedicated website for this course via the Learning@Griffith at myGriffith.

Academic Integrity Tutorial - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Student Support - provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

The Careers and Employment Team provides: Career Wellbeing, Career Planning and Decision Making, Finding Jobs, Skills Identification and Development, Graduate Employment Information, LinkedIn Profile Review, Interview Preparation, Online Psychometric and Aptitude Test Preparation, International Student Support, Disability Disclosure Strategies and Higher Degree Research (HDR) Career Consultations.

Library and Learning Services: Library and Learning Services provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. Library and Learning Services works in collaboration with the academic community to achieve academic and research outcomes.

Support for learning - the University provides access to common use computing facilities for educational purposes.

Code of Practice - Griffith Information Technology Resources.

3.5 Other Learning Resources & Information

There are numerous options for this text and students are advised to purchase the package best suited to their requirements either from Wiley direct or the Nathan Campus bookstore.

Textbook

David Klein. Organic Chemistry, 3rd Edition Australia & New Zealand Edition

ISBN: 9781119570981

AUD $139.95 Paperback

(or print + WileyPLUS: ISBN 9781119571001)

Solution Guides

Organic Chemistry: with Enhanced Student Solutions Manual and Study Guide, 3rd Edition
David R. Klein
ISBN: 978-1-119-35160-3

4. Teaching & Learning Activities

4.1 Learning Activities

Lectures

Week Commencing	Activity	Learning Outcomes
8 Mar 21 - 16 Mar 21	**Lectures Cycle 1 (Lecture Series):** Chemical Bonds, Structural Representations Molecular Properties Acids and Bases Alkanes and Cycloalkanes	2
22 Mar 21 - 30 Mar 21	**Lectures Cycle 2 (Lecture Series):** Substitution Reactions Chemistry of Alkenes and Alkynes	2
12 Apr 21 - 20 Apr 21	**Lectures Cycle 3 (Lecture Series):** Review of Stereochemistry Chemistry of alcohols, ethers and epoxides	2
4 May 21 - 11 May 21	**Lectures Cycle 4 (Lecture Series):** Conjugated Pi Systems Pericyclic Reactions An Introduction to the Chemistry of Aromatic systems	2
17 May 21 - 25 May 21	**Lectures Cycle 5 (Lecture Series):** Aldehydes, Ketones, Carboxylic acids and their Derivatives. Amines	2

Tutorial

Week Commencing	Activity	Learning Outcomes
17 Mar 21	**Small Group Tutorials - Cycle 1 (Tutorial Series):** Chemical Bonds, Structural Representations, Molecular Properties Acids and Bases Alkanes and Cycloalkanes	3
31 Mar 21	**Small Group Tutorials - Cycle 2 (Tutorial Series):** Substitution Reactions Chemistry of Alkenes and Alkynes	3
21 Apr 21	**Small Group Tutorials - Cycle 3 (Tutorial Series):** Review of Stereochemistry Chemistry of alcohols, ethers and epoxides	3
12 May 21	**Small Group Tutorials - Cycle 4 (Tutorial Series):** Conjugated Pi Systems Pericyclic Reactions An Introduction to the Chemistry of Aromatic systems	3
26 May 21	**Small Group Tutorials - Cycle 5 (Tutorial Series):** Aldehydes, Ketones Carboxylic acids and their Derivatives. Amines	3

Quiz

Week Commencing	Activity	Learning Outcomes
22 Mar 21 14:00	**Quiz - Cycle 1 (Quiz):** 50-minute quiz - N78_0.11	1
12 Apr 21 14:00	**Quiz - Cycle 2 (Quiz):** 50-minute quiz - N78_0.11	1
27 Apr 21 12:00	**Quiz - Cycle 3 (Quiz):** 50-minute quiz - N78_0.11	1
17 May 21 14:00	**Quiz - Cycle 4 (Quiz):** 50-minute quiz - N78_0.11	1
31 May 21 14:00	**Quiz - Cycle 5 (Quiz):** 50-minute quiz - N78_0.11	1

Laboratory

Week Commencing	Activity	Learning Outcomes
8 Mar 21 - 23 Apr 21	**Laboratory Session (Laboratory):** Class Laboratories	4

4.2 Other Teaching and Learning Activities Information

All students are strongly advised to refer to their Learning at Griffith site and monitor their Griffith University E-mail accounts for updates to course information and to be aware of any last-minute changes in class/quiz session times.

Content Summary:
This course covers the chemistry of the principal functional groups; organic stereochemistry and mechanisms; synthetic organic chemistry and some basic aspects of physical organic chemistry.

Contact Summary:
The teaching method utilizes both traditional lecture approaches and self-instruction from a high-quality international text. The trimester is divided into **five cycles** with a quiz at the end of each cycle. The backbone of each cycle is a lecture set and a reading program taken from the prescribed text and covers key learning outcomes in organic chemistry.

The laboratory component will consist of four hours a week for six weeks (or equivalent) of laboratory experiments. **It is compulsory to attend and participate in the laboratory classes and submit the required laboratory reports.**

Please Note:
If any student has a disability and/or health condition that may impact on their ability to successfully undertake required learning activities in this course, they are encouraged to complete the Griffith University Disclosure Statement and advise their Course Convenor.

Students Repeating a Course: Normally, students repeating a course should not 'carry forward' marks from a previous attempt. Assessment items are usually offered to provide formative experience as well as a summative assessment. Therefore, NO MARK for any assessment item from a previous attempt will be carried forward.

5. Assessment Plan

5.1 Assessment Summary

This is a summary of the assessment in the course. For detailed information on each assessment, see **5.2 Assessment Detail** below.

ASSESSMENT TASK	DUE DATE	WEIGHTING	MARKED OUT OF	LEARNING OUTCOMES	MAXIMUM EXTENSION PERIOD
Test or quiz Quiz - Cycle 1	22 Mar 21 14:00 - 22 Mar 21 14:50	16%	50 marks	1	
Test or quiz Quiz - Cycle 2	12 Apr 21 14:00 - 12 Apr 21 14:50	16%	50 marks	1, 2	
Assignment - Laboratory/ Laboratory Report Laboratory Functional Group Report	16 Apr 21 16:00 Or as Advised in Lab Manual	5%	20 marks	4	
Test or quiz Quiz - Cycle 3	27 Apr 21 12:00 - 27 Apr 21 12:50	16%	50 marks	1, 2, 3	
Assignment - Laboratory/ Laboratory Report Laboratory Reports - Unknowns 1 & 2	14 May 21 16:00 Or as Advised in Lab Manual	15%	40 marks	4	
Test or quiz Quiz - Cycle 4	17 May 21 14:00 - 17 May 21 14:50	16%	50 marks	1, 2	
Test or quiz Quiz - Cycle 5	31 May 21 14:00 - 31 May 21 14:50	16%	50 marks	1, 2	

5.2 Assessment Detail

Title: Quiz - Cycle 1
Type: Test or quiz
Learning Outcomes Assessed: 1
Due Date:
22 Mar 21 14:00 - 22 Mar 21 14:50
Weight: 16%
Marked out of: 50
Task Description:
The quiz will be held in N78_0.11 provided there is no increase in Covid-19 restrictions.
Criteria & Marking:
The quizzes are closed book and invigilated. The quiz will involve short answer questions and will require students to draw

chemical structures. Standard University policy for the sitting of exams will apply to all quizzes. Student's marks will be uploaded to L@G within five working days of the assessment date. Assessment items will not be returned to the individual but students are welcome to make an appointment with the convenor to look at their paper and discuss their performance.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Quiz - Cycle 2
Type: Test or quiz
Learning Outcomes Assessed: 1, 2
Due Date:
12 Apr 21 14:00 - 12 Apr 21 14:50
Weight: 16%
Marked out of: 50
Task Description:
The quiz will be held in N78_0.11 provided there is no increase in Covid-19 restrictions.

Criteria & Marking:
The quizzes are closed book and invigilated. The quiz will involve short answer questions and will require students to draw chemical structures.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Laboratory Functional Group Report
Type: Assignment - Laboratory/Laboratory Report
Learning Outcomes Assessed: 4
Due Date:
16 Apr 21 16:00 Or as Advised in Lab Manual
Weight: 5%
Marked out of: 20
Task Description:
Submit the Laboratory Functional Group report by the due date.

Criteria & Marking:
Students are expected to complete the supplied pro forma for the laboratory components of this course, including completing all the questions and providing relevant information when required.

Submission: In Person at the School Department. To be advised.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Quiz - Cycle 3
Type: Test or quiz
Learning Outcomes Assessed: 1, 2, 3
Due Date:
27 Apr 21 12:00 - 27 Apr 21 12:50
Weight: 16%
Marked out of: 50
Task Description:
The quiz will be held in N78_0.11 unless Covid-19 restrictions are increased.

Criteria & Marking:
Quizzes are closed book and invigilated. The quiz will involve short answer questions and will require students to draw chemical structures.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Laboratory Reports - Unknowns 1 & 2
Type: Assignment - Laboratory/Laboratory Report
Learning Outcomes Assessed: 4
Due Date:
14 May 21 16:00 Or as Advised in Lab Manual
Weight: 15%
Marked out of: 40
Task Description:
Submit Laboratory Reports for Unknowns 1 & 2

Criteria & Marking:
Students are expected to complete the supplied pro forma for the laboratory components of this course, including completing all the questions and providing relevant information when required.

Submission: In Person at the School Department. To be advised

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Quiz - Cycle 4
Type: Test or quiz
Learning Outcomes Assessed: 1, 2
Due Date:
17 May 21 14:00 - 17 May 21 14:50
Weight: 16%
Marked out of: 50
Task Description:
The quiz will be held in N78_0.11 unless Covid-19 restrictions are increased.
Criteria & Marking:
The closed book invigilated quiz will involve short answer questions and will require students to draw chemical structures.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

Title: Quiz - Cycle 5
Type: Test or quiz
Learning Outcomes Assessed: 1, 2
Due Date:
31 May 21 14:00 - 31 May 21 14:50
Weight: 16%
Marked out of: 50
Task Description:
The quiz will be held in N78_0.11 unless Covid-19 restrictions are increased.
Criteria & Marking:
The closed book invigilated quiz will involve short answer questions and will require students to draw chemical structures.

This assessment item:
- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

5.3 Late Submission

For all non-Honours Dissertation courses: An assessment item submitted after the due date, without an approved extension, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the total weighted mark for the assessment item, for each working day that the item is late. A working day will be defined as Monday to Friday. Assessment items submitted more than five working days after the due date will be awarded zero marks. To understand how the mark is reduced please refer to Assessment Procedures for Students.

For all Honours Dissertation courses: Enrolment in an Honours degree shall be cancelled and the candidature terminated if the candidate fails to lodge their Honours dissertation by the prescribed date including any approved extensions.

5.4 Other Assessment Information

Supplementary Assessment is not available for this course.

Final Grades

A student's final grade for this course will be based on the aggregation and weighting of marks across assessment, any mandatory pass components and grade cut-offs. Grade cut-offs can vary, so you will need to wait for the official release of grades to be sure of your grade for this course.

- This course is a graded course (i.e 7, 6, 5, 4, 3, 2, 1).

6. Policies & Guidelines

This section contains the details of and links to the most relevant policies and course guidelines. For further details on University Policies please visit the Policy Library

6.1 Assessment Related Policies and Guidelines

University Policies & Guidelines

The University's assessment-related policies can be found in the Griffith Policy Library.

Please refer to the following specific policies:

- Assessment Policy
- Assessment Procedure for Students

6.2 Other Policies and Guidelines

University Policies and Guidelines

Students are responsible for ensuring that they have read all sections of the Course Profile for the course/s in which they are enrolled in any enrolment period. The published online version of the Course Profile is the authoritative version and by the publication of the Course Profile online, the University deems the student has been notified of and read the course requirements. Variations to the Course Profile during the trimester of offer are not permitted except in exceptional circumstances and will be advised in writing to all enrolled students and via the *Learning@Griffith* website. Additional information regarding the content of this course may be published on the *Learning@Griffith* website.

Copyright matters

Copyright applies to all teaching materials and materials generated by students which substantially relate to Griffith University courses. *Students are warned against selling Griffith University teaching materials and their student notes online through commercial websites during and after their studies.* You will almost certainly be in breach of copyright law and Griffith's IT Code of Practice if you post these materials on the internet and commercial websites. Please refer to the Copyright Guide for Students for further information.

Health and Safety

Griffith University is committed to providing a safe work and study environment. However, all students, staff and visitors have an obligation to ensure the safety of themselves and those whose safety may be affected by their actions. Staff in control of learning activities will ensure as far as reasonably practical, that those activities are safe and that all safety obligations are being met. Students are required to comply with all safety instructions and are requested to report safety concerns to the University.

General health and safety information is available on the Health, Safety and Wellbeing website.

Other Key Student-Related Policies

All University policy documents are accessible to students via the Griffith Policy Library and links to key policy documents, in addition to those listed in 6.1 above, are included below for easy reference:

- Student Communications Policy
- Health and Safety Policy
- Student Administration Policy
- Student Charter
- Student Review and Appeals Policy
- Student Review and Appeals Procedures
- Student Complaints Policy

Other Course Guidelines

The laboratory component of this subject is compulsory.