

## **FOSX3000**

# Making Science Work for You and Society: Capstone

Session 1, Online-scheduled-weekday 2022

Science and Engineering Faculty level units

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#### Disclaimer

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### **General Information**

Unit convenor and teaching staff

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Credit points

10

Prerequisites

Admission to BSc and 20cp at 3000 level

Corequisites

Co-badged status

FOSE3000

#### Unit description

How do the skills and knowledge you have acquired fit you for the next step beyond your degree? What is the role of scientific thinking in the workplace and in solving society's problems? A major component of this unit is a cross-disciplinary project, in which you will collaborate with students from other majors in the Bachelor of Science. You will identify and practice employability and workplace skills, connecting your university experiences to career aspirations. By actively reflecting on prior learning and experiences, you will build and articulate a positive self-understanding, exploring opportunities and clarifying goals for the next stage of your career.

### Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

### **Learning Outcomes**

On successful completion of this unit, you will be able to:

**ULO1:** Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.

**ULO2:** Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.

**ULO3:** Explain the role and relevance of science in society, using examples from your and other scientific disciplines.

**ULO4:** Plan your next steps after graduation, through an appraisal of personal achievements and the current and projected work environment.

**ULO5:** Explain, with an employment and interview focus, how your study and achievements transfer to other contexts, orally and in writing.

**ULO6:** Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

### **General Assessment Information**

#### **Hurdle Assessments**

There are no hurdle assessments in this unit.

#### **Assessment Criteria**

Assessment at Macquarie University is standards-based, as outlined in the <u>Assessment Policy</u>. This means that your work will be assessed against clear criteria, and these criteria will be made available when the assessment tasks are released to you on iLearn.

#### **Submission of Assessments**

All assignments must be submitted online through <u>Turnitin</u> unless otherwise indicated. Links for the submission of each assignment will be available on <u>iLearn</u>. The due dates for all assessment tasks are not negotiable. If you have commitments that will significantly impact your study during the session then you must plan for this in advance as part of an effective individual study plan and you may need to contact the unit convenor for advice.

#### **Marking of Assessments**

Assignments will be marked through Turnitin and feedback will be noted on the assignment. **Do not** submit your assignments via email or in hard copy. Your grades will be returned using the Grades Report on iLearn.

We aim to return your assignments with feedback within two to three weeks of the date that you submit your assignment, and before your next assignment is due. We appreciate your patience and will advise you through iLearn when your marked assignments and feedback are available for viewing.

#### **Penalties for Late Assessments**

Online quizzes, in-class activities, scheduled tests and exams must be undertaken at the time indicated in the unit guide. Should these activities be missed due to illness or misadventure, students may apply for Special Consideration. All other assessments must be submitted by 5:00 pm on their due date. Should these assessments be missed due to illness or misadventure, students should apply for Special Consideration.

The penalty for late submission of assessments in this unit is *ten percent (10 %) of the assessment value per day*. A 12-hour grace period will be given after which the following deductions will be applied to the awarded assessment mark: 12 to 24 hours late = 10% deduction; for each day thereafter, an additional 10% per day or part thereof will be applied until five days beyond the due date. After this time, a mark of zero (0) will be given. Note that the deduction will be applied as a percentage of the awarded grade. (For example, if a student submits an assessment 20 hours late which is graded at 80%, their final mark will be 72%.) This is a hefty penalty designed to make you aware of the importance of organising yourself around assessment due dates. The penalty will be applied over weekdays and weekends unless you have been granted an extension prior to the due date.

#### **Extensions for Assessments**

To obtain an extension for an assessment task, you will need to follow the formal process as outlined in the <a href="Special Consideration Policy">Special Consideration Policy</a>, and you must provide appropriate supporting documentation (e.g. medical certificate - see advice for <a href="Special Consideration">Special Consideration</a> requests). The final decision regarding the granting of an extension and/or a late penalty lies with the unit convenor. Permission for extension must be sought well before the due date unless this is absolutely impossible. Let us know of problems in advance or as soon as possible, not after the event: we are likely to be much more sympathetic and flexible in our requirements if you follow this advice.

### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Pitch an idea	15%	No	Week 3
Reflection on your skills, knowledge and capabilities	10%	No	Multiple components due throughout the session
Project presentation	25%	No	Week 11
Project plan	50%	No	Week 13

#### Pitch an idea

Assessment Type 1: Presentation Indicative Time on Task 2: 10 hours

Due: Week 3 Weighting: 15%

Generate a project idea and pitch it as a team via video to a non-expert audience.

On successful completion you will be able to:

- Explain, with an employment and interview focus, how your study and achievements transfer to other contexts, orally and in writing.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

### Reflection on your skills, knowledge and capabilities

Assessment Type 1: Reflective Writing Indicative Time on Task 2: 12 hours

Due: Multiple components due throughout the session

Weighting: 10%

Reflective writing relating studies and experiences to future plans (may include CV/cover letter; application for research degree etc.)

On successful completion you will be able to:

- Plan your next steps after graduation, through an appraisal of personal achievements and the current and projected work environment.
- Explain, with an employment and interview focus, how your study and achievements transfer to other contexts, orally and in writing.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

### Project presentation

Assessment Type 1: Presentation Indicative Time on Task 2: 25 hours

Due: Week 11

Weighting: 25%

Present and pitch a team project via video. Includes formative exercise and peer assessment.

On successful completion you will be able to:

- Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.
- Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.
- Explain the role and relevance of science in society, using examples from your and other scientific disciplines.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

### Project plan

Assessment Type 1: Plan Indicative Time on Task 2: 30 hours

Due: Week 13 Weighting: 50%

Plan for a cross-disciplinary project. Components of peer and self assessment.

On successful completion you will be able to:

- Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.
- Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.
- Explain the role and relevance of science in society, using examples from your and other scientific disciplines.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

<sup>&</sup>lt;sup>1</sup> If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

### **Delivery and Resources**

#### **Unit communications**

Discussion board: In order to discuss issues of relevance to all students, please use the Discussion Board feature of iLearn. The chances are that if you are confused about something in the unit, so are your peers, so it will be useful to share your questions with all. These questions may be regarding the content of the modules (i.e. a concept you don't understand) or about requirements of the unit.

Email: For matters of a more personal nature, and that do not concern other students (i.e. requests for extensions, etc.), you should contact the Unit Convener, Joanne Dawson, by email. Contact details are provided at the start of this document.

#### Classes

The class timetable can be found through the <u>Timetable</u> portal. A detailed class schedule with assessment due dates will be made available to all enrolled students through <u>iLearn</u>. Students complete approximately 36 hours of class work (in scheduled workshops or equivalent online) and are expected to undertake 114 hours of personal study, reading and reflection to complete the unit and present the assessment tasks. Students are responsible for managing their time for learning and the tasks for group work. You will need to **bring a laptop computer or tablet to class each week.** If this is problematic for you, please contact the unit convenor who will help provide a solution. You will also need to have access to a computer to use the university systems (e.g. iLearn, library) and complete the assessment tasks.

#### **Online materials**

This unit is supported by guided online learning via a series of online components. The link for these components can be found in the <u>iLearn</u> site. Each week you will be expected to complete the component (on a particular theme) for that week in your own study time and before the workshop so that you are familiar with the content.

#### Workshops

Students enrolled in the on-campus offering are expected to attend weekly 3 hour workshops that will be held on campus. Students enrolled in online offerings will complete equivalent activities online, and will be provided with opportunities to interact with each other and unit staff via online meetings. Where in-person workshops occur, they will be very interactive and handson, exploring the theme for each week. Make sure that you have completed the weekly preworkshop online materials **before** attending the workshop, as they are designed to provide you with a framework and are an essential and important component of the unit. The online learning

<sup>&</sup>lt;sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

components are by no means exhaustive on each and every topic, and you are expected to supplement them by conducting your own research and reading. The workshops will be structured as small group discussions and tasks - the **more** you contribute the more you will learn and gain from this unit. The workshops will also provide time and support for working on the main project in teams.

#### **Unit Schedule**

The unit schedule will be available on iLearn.

#### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- · Fitness to Practice Procedure
- · Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

#### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

#### Results

Results published on platform other than <a href="mailto:eStudent">eStudent</a>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <a href="mailto:eStudent">eStudent</a>. For more information visit <a href="mailto:ask.mq.edu.au">ask.mq.edu.au</a> or if you are a Global MBA student contact <a href="mailto:globalmba.support@mq.edu.au">globalmba.support@mq.edu.au</a>

### **Academic Integrity**

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the

expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

### Student Support

Macquarie University provides a range of support services for students. For details, visit <a href="http://students.mq.edu.au/support/">http://students.mq.edu.au/support/</a>

#### **The Writing Centre**

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- · Chat with a WriteWISE peer writing leader
- Access StudyWISE
- · Upload an assignment to Studiosity
- · Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- · Subject and Research Guides
- Ask a Librarian

### Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study
- Mental health support
- <u>Safety support</u> to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues

### Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

### IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> offices\_and\_units/information\_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.