

# **CBMS702**

# **Selected Topics in Molecular Sciences 2**

S2 Day 2019

Dept of Molecular Sciences

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#### Disclaimer

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## **General Information**

Unit convenor and teaching staff

**Unit Convener** 

Louise Brown

louise.brown@mq.edu.au

Contact via Email

E8C Room 305

Tuesday to Friday (9am to 4pm) by appointment

Credit points

4

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

This unit will focus on special topics in Molecular Science. Topics may include biochemistry, cell biology, molecular biology and genomics, medicinal chemistry, organic chemistry, and analytical chemistry; and focus on processes in molecular sciences. Topics will be chosen to encourage students to explore the different disciplines in the Molecular Sciences and to develop skills in analysis and investigation that are necessary and required to undertake more advanced research.

# 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:

Acquire a coherent and advanced knowledge of the principles and concepts within the discipline area

Demonstrate an advanced knowledge of research principles and methods

Synthesize and analyse information from a variety of sources

Identify and provide solutions to complex problems with intellectual independence

Articulate clearly a coherent argument in written, oral and technical communication skill

as relevant to the specific needs of the discipline

Think critically and make informed and logical judgement on the arguments of others to arrive at reasonable and meaningful arguments and positions, and formulate and apply ideas to new contexts

Demonstrate the ability to apply accumulated knowledge and skills to make decisions in the context of professional practice and/or scholarship

### **Assessment Tasks**

Name	Weighting	Hurdle	Due
Assignment 1, 2 and 3	100%	No	Consult MRes Advisor

# Assignment 1, 2 and 3

Due: Consult MRes Advisor

Weighting: 100%

Assessment tasks and weighting to be determined by supervisor for project/activity based units or as listed in unit guides where other units are being undertaken; and approved by Unit Convener.

Minimum 3 tasks required, with a maximum of 60% weighting for any one task. Tasks can vary, eg scientific report, essay (3000 words), exam. Workload must be appropriate for 4cp unit.

On successful completion you will be able to:

- Acquire a coherent and advanced knowledge of the principles and concepts within the discipline area
- Demonstrate an advanced knowledge of research principles and methods
- Synthesize and analyse information from a variety of sources
- Identify and provide solutions to complex problems with intellectual independence
- Articulate clearly a coherent argument in written, oral and technical communication skill as relevant to the specific needs of the discipline
- Think critically and make informed and logical judgement on the arguments of others to arrive at reasonable and meaningful arguments and positions, and formulate and apply ideas to new contexts
- Demonstrate the ability to apply accumulated knowledge and skills to make decisions in the context of professional practice and/or scholarship

# **Delivery and Resources**

Student should consult with supervisor for project/activity based units or as listed in unit guides

where other units are being undertaken. Content must be approved by MRes Advisor.

This content taken in this unit will allow students undertaking the MRes/BPhil research training pathway to further develop their research skills. Particularly, this unit allows students with limited research experience to develop skills in literature searches, scientific writing, critical analysis of literature and data, formulating and addressing scientific questions, improve their analytical skills and understanding of scientific method, and further their knowledge of the molecular sciences. This unit allows a student to develop and build upon knowledge and skills gained during their undergraduate degree, and will enhance other units of specialist knowledge that they will be undertaking as part of the MRes/BPhil program.

## **Unit Schedule**

Student should consult with supervisor for project/activity based units or as listed in unit guides where other units are being undertaken.

## **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy (Note: The Special Consideration Policy is effective from 4
   December 2017 and replaces the Disruption to Studies Policy.)

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

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

#### Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/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>

# 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>

## **Learning Skills**

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- · Academic Integrity Module for Students
- Ask a Learning Adviser

# Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

# Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

# 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.

# **Graduate Capabilities**

# PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

## Learning outcomes

- Synthesize and analyse information from a variety of sources
- Identify and provide solutions to complex problems with intellectual independence
- Think critically and make informed and logical judgement on the arguments of others to arrive at reasonable and meaningful arguments and positions, and formulate and apply ideas to new contexts
- Demonstrate the ability to apply accumulated knowledge and skills to make decisions in the context of professional practice and/or scholarship

### Assessment task

Assignment 1, 2 and 3

# PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

## Learning outcome

 Acquire a coherent and advanced knowledge of the principles and concepts within the discipline area

#### Assessment task

Assignment 1, 2 and 3

# PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

# Learning outcomes

- Demonstrate an advanced knowledge of research principles and methods
- Identify and provide solutions to complex problems with intellectual independence
- Think critically and make informed and logical judgement on the arguments of others to arrive at reasonable and meaningful arguments and positions, and formulate and apply

ideas to new contexts

### Assessment task

Assignment 1, 2 and 3

# PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### Learning outcomes

- · Demonstrate an advanced knowledge of research principles and methods
- · Synthesize and analyse information from a variety of sources
- · Identify and provide solutions to complex problems with intellectual independence

### Assessment task

· Assignment 1, 2 and 3

## PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

# Learning outcome

 Articulate clearly a coherent argument in written, oral and technical communication skill as relevant to the specific needs of the discipline

### **Assessment task**

· Assignment 1, 2 and 3

# PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

## **Learning outcomes**

- Think critically and make informed and logical judgement on the arguments of others to arrive at reasonable and meaningful arguments and positions, and formulate and apply ideas to new contexts
- Demonstrate the ability to apply accumulated knowledge and skills to make decisions in the context of professional practice and/or scholarship

### **Assessment task**

• Assignment 1, 2 and 3