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<td>17</td>
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</table>
General Information

Unit convenor and teaching staff
Unit Convenor
Albert Atkin
albert.atkin@mq.edu.au
Contact via albert.atkin@mq.edu.au

Tutor
Wilson Cooper
wilson.cooper@mq.edu.au

Lecturer, Co-Convenor
Melanie Rosen
melanie.rosen@mq.edu.au

Tutor
Douglas McConnell
douglas.mcconnell@mq.edu.au

Tutor
Simon Varey
simonvarey@gmail.com
Contact via Email

Tutor
Matthew Hammerton
matthew.hammerton@anu.edu.au
Contact via Email

Tutor
Ali Navabi
navvabimayan@yahoo.com
Contact via Email

Tutor
Jennifer Duke-Yonge
jennifer.duke-yonge@mq.edu.au
Contact via Email

Credit points
3
Unit guide PHL 137 Critical Thinking

Prerequisites

Corequisites

Co-badged status

Unit description
This unit aims to teach the fundamentals of critical thinking and reasoning. Students learn how to construct, analyse and critically evaluate arguments; how to detect common fallacies in reasoning; and how to think logically and creatively. We teach these skills by developing practical techniques for the evaluation of reasoning, and applying them to arguments from business, law, science, politics, philosophy and the media. Critical thinking skills are invaluable across all disciplines, and will benefit students in academic contexts and in life beyond university.

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:

To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.

To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.

To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.

To develop critical analysis skills.

To develop problem-solving skills.

To develop creative-thinking skills.

Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
</tr>
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<tbody>
<tr>
<td>On Line Quiz 1</td>
<td>10%</td>
<td>From 21/03/16 to 25/03/16</td>
</tr>
<tr>
<td>On Line Quiz 2</td>
<td>10%</td>
<td>From 09/05/16 to 13/05/16</td>
</tr>
<tr>
<td>On Line Quiz 3</td>
<td>10%</td>
<td>From 06/06/16 - 10/06/16</td>
</tr>
</tbody>
</table>
### On Line Quiz 1

**Due:** From *21/03/16 to 25/03/16*

**Weighting:** 10%

Available from 9am on Monday 21/03/2016, for one teaching week. It will close at Midnight on Friday 25/03/16.

The first quiz is a 30 minute multiple-choice quiz which you will take through the unit website. You can make one attempt only. It is a timed quiz which cannot be paused once you start.

It will test your understanding of important concepts introduced in Topics 1 to 3. It will provide you with early feedback on your progress.

On successful completion you will be able to:

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

### On Line Quiz 2

**Due:** From *09/05/16 to 13/05/16*

**Weighting:** 10%

Available 9am on Monday 09/05/16 - I will leave this quiz open for one teaching week. It will close at Midnight on Friday 13/05/16.

The second quiz is a 30 minute multiple-choice quiz which you will take through the unit website. You can make one attempt only. It is a timed quiz which cannot be paused once you start.
It will test your understanding of important concepts introduced in Topics 4, 5, 6, and 7.

On successful completion you will be able to:

- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

On Line Quiz 3
Due: From 06/06/16 - 10/06/16
Weighting: 10%

Available 9am on Monday 6/06/16 - I shall leave the quiz open for one teaching week to Midnight on Friday 10/06/16.

The third quiz is a 30 minute multiple-choice quiz which you will take through the unit website. You can make one attempt only. It is a timed quiz which cannot be paused once you start.

It will test your understanding of important concepts introduced in Topics 8, 9, 10 and 11.

On successful completion you will be able to:

- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

Mid Session Assessment
Due: 08/04/2016
Weighting: 25%

A mid session assessment that requires you to construct an argument of your own on a set topic.
You must use what you have learned in the course to build a robust argument and provide a 500-750 word reflection/explanation of your argument. This paper will be marked by your tutors.

Topics/Questions will be released no later than Monday 14th March - you must submit, online, through the iLearn site, by no later than Midnight on Friday 8th April.

On successful completion you will be able to:

• To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
• To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
• To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
• To develop critical analysis skills.
• To develop problem-solving skills.
• To develop creative-thinking skills.

Participation

Due: 04/06/16
Weighting: 10%

You will take a Harvard Implicit Association test. This is a simple online assessment of our implicit views. You will then answer some short questions reflecting on the findings of your test and a related reading.

The test will be made available on April 25th. You must submit online by the end of Week 12 - 04/06/2016

On successful completion you will be able to:

• To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
• To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
• To develop critical analysis skills.
• To develop problem-solving skills.
• To develop creative-thinking skills.
Final Assessment

Due: 17/06/2016
Weighting: 35%

The written assignment requires you use the skills you have acquired throughout the course to write a report analysing an argument and providing guidance and material for a counter-response.

The full assignment, a scenario, and an information resource file, will be made available through the unit website no later than 28/03/16 and must be submitted no later than Midnight on Friday 17th June.

On successful completion you will be able to:

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

Delivery and Resources

Lectures and Tutorials

For lecture times and classrooms please consult the MQ Timetable website: http://www.timetables.mq.edu.au. This website will display up-to-date information on your classes and classroom locations.

Attendance isn't compulsory, but people do often benefit.

Unit Webpages and E-Resources

This course has many resources including notes, practice quizzes, your tests, submission boxes, recordings of lectures for download, all available and accessed at: http://ilearn.mq.edu.au/.

PC and Internet access are required. Basic computer skills (e.g., internet browsing) and skills in word processing are also a requirement. Please consult teaching staff for any further, more specific requirements.
Course Texts
The Course Notes available through the PHL 137 ilearn site constitute a text for the course. No other text is required. If you simply must have a copy of a book for support, ask your tutor for advice.

Changes Since Last Offering
Content and assessment has been altered and updated.

Unit Schedule

<table>
<thead>
<tr>
<th>Topic 1</th>
<th>WC 29/02</th>
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<tbody>
<tr>
<td>Introduction - What is critical thinking and why do we need it?; What are arguments?</td>
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<table>
<thead>
<tr>
<th>Topic 2</th>
<th>WC 07/03</th>
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<tr>
<td>Standardisation and Reconstruction of Arguments</td>
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<table>
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<tr>
<th>Topic 3</th>
<th>WC 14/03</th>
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<tbody>
<tr>
<td>Deductive Arguments</td>
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<table>
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<tr>
<th>Topic 4</th>
<th>WC 21/03</th>
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<tr>
<td>Inductive Arguments</td>
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<table>
<thead>
<tr>
<th>Topic 5</th>
<th>WC 28/03</th>
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<tr>
<td>Critical Thinking and The Human Mind</td>
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<table>
<thead>
<tr>
<th>Topic 6</th>
<th>WC 04/04</th>
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<tr>
<td>&quot;Automatic&quot; Thinking and Critical Reasoning</td>
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Semester Break
This will also include the Week Commencing 25/4 because of the Anzac Day Holiday

<table>
<thead>
<tr>
<th>Topic 7</th>
<th>WC 02/05</th>
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<tbody>
<tr>
<td>&quot;Social&quot; Thinking and Critical Reasoning</td>
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Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:


In addition, a number of other policies can be found in the Learning and Teaching Category of 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/support/student_conduct/

Results

Results shown in iLearn, 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 eStudent. For more information visit ask.mq.edu.au.

Student Support

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

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 Disability Service 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

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

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

Graduate Capabilities

Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.
This graduate capability is supported by:

**Learning outcomes**

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

**Assessment tasks**

- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
- Final Assessment

**Capable of Professional and Personal Judgement and Initiative**

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

**Learning outcomes**

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
To develop creative-thinking skills.

**Assessment tasks**
- On Line Quiz 1
- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
- Participation
- Final Assessment

**Commitment to Continuous Learning**
Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

**Learning outcomes**
- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop problem-solving skills.
- To develop creative-thinking skills.

**Assessment tasks**
- On Line Quiz 1
- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
- Participation
- Final Assessment
Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.

Assessment tasks

- On Line Quiz 1
- On Line Quiz 3
- Final Assessment

Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts,
and to recognise the generalisability of these skills, and their applicability to other disciplines.

- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

**Assessment tasks**

- On Line Quiz 1
- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
- Final Assessment

**Problem Solving and Research Capability**

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

**Learning outcomes**

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop problem-solving skills.
- To develop creative-thinking skills.

**Assessment tasks**

- On Line Quiz 1
- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcomes

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each.
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
- To develop critical analysis skills.
- To develop creative-thinking skills.

Assessment tasks

- On Line Quiz 1
- On Line Quiz 2
- On Line Quiz 3
- Mid Session Assessment
- Participation
- Final Assessment

Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:
Learning outcomes

• To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
• To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
• To develop problem-solving skills.
• To develop creative-thinking skills.

Assessment tasks

• On Line Quiz 2
• On Line Quiz 3
• Participation
• Final Assessment

Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Learning outcomes

• To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form.
• To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines.
• To develop problem-solving skills.
• To develop creative-thinking skills.

Assessment tasks

• On Line Quiz 2
• On Line Quiz 3
• Participation
• Final Assessment
Changes from Previous Offering
Changes in assessment

Changes since First Published

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>01/03/2016</td>
<td>Updated names of tutors included 2 discrepancies in the due dates for assignments</td>
</tr>
<tr>
<td></td>
<td>(IAT participation and final assignment) fixed.</td>
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