### **MOOC 3 – Critical Thinking**

Outline of topics

#### **Learning Outcomes**

- Use critical thinking and argumentation in university contexts to improve academic results
- Understand the importance and function of critical thinking in academic culture
- Use a variety of thinking tools to improve critical thinking
- Identify types of argument, and bias within arguments, in order to better evaluate the strength of arguments
- Use evidence to support claims in arguments
- Apply critical thinking and argumentation to real world problems and issues
- Demonstrate critical thinking in communication in academic contexts

#### Week 1 - Introduction to critical thinking in academic culture

After this module you will be able to ... 1. Understand the importance of critical thinking in an academic context 2. Know the difference between critical thinking and argumentation 3. Recognise the importance of change as a student and learner in higher education contexts 4. Abide by accepted definitions and practices of academic integrity

4. Ablae by accepted definitions and practices of academic integrity					
Module	Topic Focus	Learning Objectives (You will be able to)			
1.1	Introduction to the course	<ul> <li>understand the learning objectives and structure of the course</li> <li>understand the expectations for participation in the course</li> <li>understand assessment requirements of the course</li> </ul>			
1.2	Introduction to Academic Culture & Critical Thinking	<ul> <li>understand the history and definition of the term 'critical thinking'</li> <li>recognise the difference between critical thinking and argumentation</li> <li>understand the importance of critical thinking in contemporary academic contexts</li> </ul>			
1.3	Survival skills for university	gain insight into key skills for success at university			
1.4	Academic integrity	<ul> <li>understand the definition of academic integrity</li> <li>demonstrate awareness of ethical issues related to academic integrity surrounding communication</li> </ul>			

## **MOOC 3 – Critical Thinking**

Outline of topics

#### Week 2 - Critical thinking in academic contexts

After this module you will be able to ... 1. Understand that being a critical thinker at university requires certain values and dispositions cultivated over time 2. Know that critical thinking requires certain metacognitive skills and habits of mind 3. Recognise whether an argument belongs in the personal, public or technical spheres 4. Critically interrogate concepts and texts for academic success

imerrogate c	interrogate concepts and texts for academic success					
Module	Topic Focus	Learning Objectives (You will be able to)				
2.1	Dispositions & Habits of Mind for Critical Thinking	<ul> <li>understand the importance of values and dispositions in critical thinking</li> <li>realise the importance of metacognitive skills and habits of mind for critical thinking</li> <li>appreciate your strengths and weaknesses in critical thinking</li> </ul>				
2.2	Argument Spheres	<ul> <li>understand the differences between the three argument spheres: personal, public and technical</li> <li>grasp the importance of the technical sphere of argument in academic life and how personal and public argument spheres also play a role</li> <li>identify which argument sphere different arguments belong to</li> </ul>				
2.3	Argument Fields	<ul> <li>understand how critical thinking can vary between academic fields</li> <li>recognise the more common forms of critical thinking in different fields</li> <li>appreciate how timing and nature of critical thinking varies between undergraduate degrees</li> </ul>				
2.4	Questioning in Critical Thinking	<ul> <li>appreciate the importance of taking a questioning stance in relation to concepts and texts at university</li> <li>develop questions in order to critically interrogate ideas and texts</li> </ul>				

## **MOOC 3 – Critical Thinking**

Outline of topics

#### Week 3 - Logic and reasoning

After this module you will be able to ... 1. Recognise common mistakes and fallacies in thinking 2. Use premises to lead to robust conclusions to improve your university assignments 3. Employ deductive and inductive reasoning in critical thinking 4. Use systems thinking to make connections between ideas and events and understand complex situations

Silvations					
Module	Topic Focus	Learning Objectives			
		(You will be able to)			
3.1	Premises and conclusions	<ul> <li>understand the use of premises and conclusions</li> <li>recognise a range of formal logical fallacies that can occur in arguments</li> <li>identify when arguments are missing premises or conclusions</li> </ul>			
3.2	Common fallacies	<ul> <li>understand how logical fallacies can weaken arguments</li> <li>recognise a number of common logical fallacies in academic contexts</li> <li>identify the use of logical fallacies</li> </ul>			
3.3	Forms of reasoning	<ul> <li>understand the differences between inductive and deductive reasoning</li> <li>recognise their use in different university contexts</li> <li>identify when different forms of reasoning are being used</li> </ul>			
3.4	Applying systems thinking	<ul> <li>understand that critical thinking involves making connections between ideas, theories and events</li> <li>apply systems thinking to make connections between ideas and events</li> </ul>			

# **MOOC 3 – Critical Thinking**

Outline of topics

### Week 4 - Argumentation

After this module you will be able to ... 1. Use suitable evidence to support claims 2. Identify biases and assumptions in arguments 3. Apply relevant criteria in order to evaluate arguments 4. Identify and use a variety of different argument types

evaluate arguments 4. Identity and use a variety of different argument types			
Module	Topic Focus	Learning Objectives	
		(You will be able to)	
4.1	Claims and evidence	understand what a claim is, and what evidence is	
	evidence	<ul> <li>grasp the importance of supporting claims with evidence in academic contexts</li> </ul>	
		<ul> <li>understand how different forms of evidence are used in different disciplinary contexts</li> </ul>	
		critically evaluate claims and the evidence used to support them	
4.2	Identifying biases and assumptions	identify biases and assumptions in texts	
		<ul> <li>understand how language can be used to hide biases</li> </ul>	
		<ul> <li>self-assess your own biases and assumptions</li> </ul>	
4.3	Using Critical Thinking to	<ul> <li>understand the use of various forms of criteria when evaluating arguments</li> </ul>	
	Evaluate Arguments	<ul> <li>identify disciplinary differences between criteria commonly used to evaluate arguments</li> </ul>	
		apply a number of criteria to evaluate arguments	
4.4	Types of	understand and identify different argument types	
	arguments	<ul> <li>understand the benefits and drawbacks of different argument types</li> <li>apply different criteria to evaluate their effectiveness</li> </ul>	
		,	

## **MOOC 3 – Critical Thinking**

Outline of topics

#### Week 5 - Demonstrating critical thinking

After this module you will be able to ... 1. Employ a variety of argument structures in university assignments 2. Understand the importance of warrants, rebuttals and qualifiers in constructing academic arguments 3. Use critical thinking to understand and change social and political contexts 4. Write reflectively in order to demonstrate critical thinking

social and political contexts 4. Write reflectively in order to demonstrate critical thinking			
Module	Topic Focus	Learning Objectives (You will be able to)	
5.1	Argument structures	<ul> <li>understand how arguments can be linked</li> <li>identify how to link arguments into chains to improve your writing</li> </ul>	
5.2	Models for academic argumentation	<ul> <li>understand how argument models can improve your critical thinking</li> <li>recognise the various parts of an argument</li> <li>identify the different parts of an argument in a piece of writing</li> </ul>	
5.3	Critical thinking and critique	<ul> <li>understand the differences between critical thinking within a liberal humanist tradition and critical thinking with a social and political orientation ('critique')</li> <li>apply critical thinking with a social and political orientation to understand the broader social contexts of ideas</li> </ul>	
5.4	Critical thinking and reflective writing	<ul> <li>recognise how reflective writing is used to demonstrate critical thinking</li> <li>establish a position in reflective writing as a critical thinker</li> </ul>	