



## UNIVERSITI TEKNOLOGI MARA

### ALS411: CRITICAL THINKING

<b>Course Name (English)</b>	CRITICAL THINKING <b>APPROVED</b>
<b>Course Code</b>	ALS411
<b>MQF Credit</b>	3
<b>Course Description</b>	This course focuses on developing the ability of students to think clearly, logically and analytically in a wide range of problem solving situations. They will be exposed to different criteria for evaluating information, establishing facts, making assumptions and inferences, forming opinions as well developing, analyzing and evaluating arguments. Students will develop their critical thinking skills through reading, speaking and writing. They will also be able to discuss enduring and current issues, and case studies. They will also participate actively in small group discussions which provide opportunities for reflective thinking and independent opinions.
<b>Transferable Skills</b>	-Demonstrate ability to communicate clearly and confidently, and listen critically (Effective Communicator) -Demonstrate ability to apply creative, imaginative and innovative thinking and ideas to problem solving (Independent and Critical Thinker) -Demonstrate ability to analyse issues/problems from multiple angles and make suggestions (Solution Provider)
<b>Teaching Methodologies</b>	Blended Learning, Lab Work, Studio, Inquiry-based Learning, Microteaching, Seminar/Colloquium, Industrial Training, Demonstrations, Case Study, Practical Classes, Tutorial, Web Based Learning, Language Games, Language Enrichment Activities, Reading With Emphasis On Vocabulary, Reading Into Writing Task, Reading Activity, Listening Activity, Simulation Activity, Clinic, Bed-Side Teaching, Ward Work, Museum Session, Presentation, Workshop, Fixed Learning Resources , Early Clinical Exposure, Self-directed Learning, Directed Self-learning , Computer Aided Learning, On-calls, Journal/Article Critique, Supervision
<b>CLO</b>	CLO1 relate critical thinking principles in various contexts. CLO2 explain inductive and deductive reasoning in arguments. CLO3 specify arguments and counter arguments in texts based on the principles of critical thinking. CLO4 evaluate arguments for their strengths and weaknesses.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Introduction to Critical Thinking</b> 1.1) What is critical thinking? 1.2) Critical Thinking standards 1.3) The benefits of critical thinking 1.4) Barriers to critical thinking 1.5) Characteristics of a critical thinker	
<b>2. Arguments</b> 2.1) What is an argument? 2.2) Identifying premises and conclusions 2.3) What is not an argument 2.4) Toulmin Model of Argument 2.5) Rogerian Model of Argument	

**3. Basic Logical Concepts**

- 3.1) Definitions and characteristics of deductive and inductive argument
- 3.2) Common patterns of deductive reasoning
- 3.3) Common patterns of inductive reasoning
- 3.4) Deductive validity
- 3.5) Inductive strength

**4. Logical Fallacies**

- 4.1) Fallacies of relevance
- 4.2) Fallacies of insufficient evidence

**5. Language**

- 5.1) Precision in the definition and choice of words
- 5.2) Ambiguity
- 5.3) Emotive language for slanting the truth
- 5.4) Euphemisms and political correctness

**6. Thinking Critically about Science and Pseudoscience**

- 6.1) The basic patterns of scientific reasoning
- 6.2) The limitations of science
- 6.3) How to distinguish science from pseudoscience
- 6.4) Case studies in pseudoscience and the paranormal

**7. Evaluating Arguments**

- 7.1) Good Arguments
- 7.2) Bad Arguments

Assessment Breakdown		%	
Continuous Assessment		100.00%	

  

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Specify arguments and counter arguments in texts based on the principles of critical thinking.	25%	CLO3
	Final Test	Evaluate arguments for their strengths and weaknesses.	30%	CLO4
	Presentation	Explain inductive and deductive reasoning in arguments.	25%	CLO2
	Test	Relate critical thinking principles in various contexts.	20%	CLO1

  

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>Gregory Bassham, William Irwin, Henry Nordone &amp; James Wallace 2019, <i>Critical Thinking</i>, 6th Edition Ed., 15 Chapters, McGraw Hill [ISBN: 9780078038396]</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>Jennifer Wilson 2017, <i>Critical Thinking</i>, 1st Edition Ed., 12, CreateSpace Independent Publishing Platform [ISBN: 9781542966146]</li> <li>James E. Ryan 2017, <i>Wait, What?</i>, 1st Edition Ed., 32, HarperOne New York [ISBN: 9780062664570]</li> <li>Rolf Dobelli 2013, <i>The Art of Thinking Clearly</i>, 1st Edition Ed., Harper [ISBN: 9780062219688]</li> <li>Lewis Vaughn 2015, <i>The Power of Critical Thinking</i>, 5th Edition Ed., Oxford University Press, USA [ISBN: 9780199385423]</li> </ul>
Article/Paper List	Reference Article/Paper Resources	<ul style="list-style-type: none"> <li>Djiwandono, Patrisius Istiarto 2013, Critical Thinking Skills for Language Students, <i>TEFLIN Journal</i>, Vol.24 Issue 1, 15</li> <li>Fahim, Mansoor; Masouleh, Nima Shakouri 2012, Critical Thinking in Higher Education: A Pedagogical Look, <i>Theory and Practice in Language Studies</i>, (Vol. 2, no. 1) [ISSN: 1799-2591]</li> <li>Kusick, G. 2014, Academia's lack of emphasis on soft skills yields unprepared workforce, <i>University Wire [Carlsbad]</i>, 4 Dec 2014</li> <li>Manshaee, Gholamreza; Dastnaee, Tahereh Mahmoudian; Seidi, Ali; Davoodi, Azam 2014, Comparison of Critical Thinking in Students Interested and Uninterested in Learning a Second Language, <i>Theory and Practice in Language Studies</i>, Vol.4, Issue 4, 7</li> <li>Weissberg, R. 2013, Critically Thinking about Critical Thinking, <i>Springer Science+Business Media New York</i>, 30 July 2013, 11</li> </ul>
Other References	<ul style="list-style-type: none"> <li>website The Online Teacher Resource <a href="http://www.teach-nology.com/worksheets/critical_thinking">website</a> <a href="http://www.teach-nology.com/worksheets/critical_thinking">http://www.teach-nology.com/worksheets/critical_thinking</a></li> <li>website Fleming, G. <i>Critical Thinking Exercises</i> <a href="http://homeworktips.about.com › Research Papers">http://homeworktips.about.com › Research Papers</a></li> </ul>	