

2012

Critical reasoning: Topic 6 (optional)

OER University

The aim of this course is to provide an opportunity to acquire critical thinking tools to critically analyse and evaluate knowledge claims. These tools are crucial to making informed decisions in study, work and private situations. Topic 6 is optional. It provides guidelines for students interested to register for studies with the University of South Africa (Unisa) who wish to receive credit for the Critical Reading coursework already completed.



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Who is this guide for?

This guide is for students who have completed the OER University course on Critical Reasoning and who now wish to register to study with the University of South Africa (Unisa), and to receive credit for the coursework already completed through Recognition of Prior Learning (RPL).

What is RPL?

RPL is a process which enables prior learning and experience to be acknowledged and evaluated towards recognition in a formal programme of study. Unisa has an RPL department which processes applications on an individual basis. The key assumption underpinning the Unisa RPL process and policy is that students requesting RPL should be able to demonstrate knowledge and competences consistent with the level and exit level outcomes of the course for which RPL is requested. Typically, this will involve completing a portfolio of evidence and/or a challenge assessment under controlled circumstances. Typically the fee for the RPL evaluation is about half that of the fee for the taught course.

Note that you must request RPL for the Critical Reasoning course in your initial application and be prepared to provide the necessary evidence to support the application.

What evidence will be needed?

In the Critical Reasoning Course Guide, we explained the assessment strategy as follows:

Activities	Certificate of completion for students not pursuing integration into a larger qualification	Formal accreditation for integration into a Unisa programme
Quizzes x 2 (auto-assessed; random selection from databank)	Weighting 30%	Weighting 15%
Assignment in 2 parts (self- and peer assessed against rubric in wiki process)	Weighting 40%	Weighting 20%
Reflection journal (self-assessed against rubric)	Weighting 30%	Weighting 15%

Successful students will receive a certificate of accomplishment for the course. Students will receive a copy of the assessment results including assessor comments. Successful students will receive 12 credits duly recorded on the student's academic transcript at the University of South Africa provided satisfactory evidence is provided of course completion (weighted at 50%) AND provided applicants successfully complete a proctored challenge assessment weighted at 50%.

As taught at Unisa, the Critical Reasoning course assessment strategy comprises a coursework component in the form of assignments and a venue-based, invigilated examination.

In your engagement with the OER University course, you kept a journal and completed a number of tasks both offline and online. You need to collect all that evidence in one place. If you kept a digital journal and drafted your online postings/blogs in your journal before putting them online, you should already have all the evidence that you need of your engagement with the course, in a format that can easily be sent for verification by email.

If you kept a hard copy journal as well as your online postings, you will need to print copies of your online postings to add to your hard copy journal so that you have a complete record of your engagement with the course. You could then scan the document so that it can be attached to an email or you might need to post it, preferably by registered post.

Your journal must include:

1. Evidence of your engagement with activities in the core Readings
2. Your answers to the two Quizzes together with evidence of any discussion you had with fellow students which may or may not have caused you to change your original answer
3. Copies of the two argumentative essays that you worked on:
 - a. The essay that you initiated and finalised but where the body was developed by your peers; and
 - b. The essay you wrote in full with copies of the feedback you received and your reflection on the process.

In addition to providing evidence of your coursework, you will most likely also be asked to undergo a challenge assessment. Currently challenge assessments comprise venue-based, invigilated examination papers offered in examination centres around the world. However, Unisa is also exploring a range of non-venue-based approaches to summative assessment so a wider range of options may become available in time.

What would a challenge assessment look like?

In the activities you completed for this course, we asked you to do two kinds of things:

1. Demonstrate your knowledge and competence in recognising and evaluating different kinds of arguments and common errors of reasoning; and
2. Construct arguments, in the form of essays, which demonstrate your ability to reason critically.

You can therefore expect a challenge assessment to comprise one or both of these kinds of activities.

How can I prepare for a challenge assessment?

You need to revise the course materials and practise your essay-writing skills.

1. To help you with the former, we include here two additional quizzes that you can use for self-assessment purposes.
2. To help you with the latter. We include a rubric that you can use to self-assess your own practice essays. (You could adapt it to incorporate additional aspects you considered important from the guidelines you developed collaboratively in Topic 5.)

Quiz 1

Questions/activities

1. Read the following statement:

“Critical reasoning involves the skills of analysing arguments according to the methods of formal logic to discern argument structure.”

Is this statement true or false?

1 True

2 False

2. Which of the terms listed below best encompasses the following definition:

“Societal assumptions that have a decisive influence on our thinking.”

1 Preconceived ideas

2 Stereotyping

3 Labelling

4 Social conditioning

3. Read the following statement:

“A woman is always the heart of the family.”

What type of preconceived idea is this statement an example of?

1 Social conditioning

2 Stereotyping

3 Labelling

4 Naming

4. What is the word “hence” an example of?
- 1 Premise indicator
 - 2 Statement indicator
 - 3 Conclusion indicator
 - 4 Argument indicator
-
5. Examine the options provided below and determine which one is not a characteristic of critical thinkers.
- 1 Failure to accept arguments which do not conform to the structures of logic.
 - 2 Reliance on arguments presented by persons in positions of authority.
 - 3 Well reasoned, evidentiary supported positions can be accepted as true.
 - 4 Investigation into the assumptions and preconceived ideas of society.
-
6. Which fallacy would one be committing were one to follow the correct answer of Question 5 (above)?
- 1 Argumentum ad baculum
 - 2 Argumentum ad hominem
 - 3 Argumentum ad populum
 - 4 Argumentum ad verecundiam
-
7. Would a critical reasoner embrace “dogma” (defined by the Merriam-Webster Dictionary as: “A point of view or tenet put forth as authoritative without adequate grounds” [Viewed on 13 June 2011 at: <http://www.merriam-webster.com/dictionary/dogma>])?
- 1 Yes
 - 2 No
-
8. Are preconceived ideas necessarily negative?
- 1 Yes
 - 2 No
-
9. What name is given to fallacies which attempt to persuade of a particularly weak argument, in which attention is drawn away from the argument itself?
- 1 Fallacies of reason
 - 2 Fallacies of structure

3 Fallacies of distraction

4 Fallacies of emotion

10. From the definition provided, identify which fallacy is being defined.

“This kind of fallacy occurs when an arguer presents an argument which is in fact a distortion of the original argument, and then proceeds to defeat the distorted argument while not in fact defeating the original argument presented.”

1 Argumentum ad hominem

2 Slippery slope argument

3 Straw man argument

4 Circular reasoning

11. Examine the following argument:

“Reality comprises only that which can be experienced by the senses, because all that can be proven is what is sensorially experienced.”

Which of the following fallacies is evident above?

1 Petitio principii

2 Straw man argument

3 Fallacy of excluded middle

4 Equivocation

12. Read the following argument, and identify from the options below which fallacy is committed by the arguer.

“The lecturer proclaimed to his colleagues, ‘It is necessarily the case that the student in question was either incapable of adequately grasping the work required or was just too lazy to study.’”

1 Fallacy of begging the question

2 Fallacy of equivocation

3 Fallacy of circular reasoning

4 Fallacy of excluded middle

13. The famed Cambridge physicist, Stephen Hawking cites the following statement made by Lord Kelvin in Hawking's publication *The Grand Design*:

"... the ether was 'the only substance we are confident of in dynamics. One thing we are sure of, and that is the reality and substantiality of the luminous ether.'" (2010:95)

Which of the following fallacies is evident in Lord Kelvin's reasoning?

- 1 Circular reasoning
 - 2 Slippery slope argument
 - 3 False appeal to authority
 - 4 False dilemma
-

14. On Saturday, 30th October 2010, the Youth League president of the African National Congress, Mr. Julius Malema, made the following statement before a 3000 strong crowd at a Western Cape rally, concerning Mrs. Helen Zille, the head of the Democratic Alliance and Premier of the Western Cape province:

"You have put a cockroach in Cabinet and we need to remove that cockroach by voting the ANC into power."

(Viewed on 17 June 2011 at: <http://www.citizen.co.za/citizen/content/en/citizen/localnews?oid=148235&sn=Detail&pid=146826&l-won%E2%80%99t-get-into-the-gutter-with-Malema%E2%80%93Zille-on-insult-->)

Which fallacy could Mr. Malema be accused of having committed?

- 1 Argumentum ad baculum
 - 2 Argumentum ad hominem
 - 3 Argumentum ad populum
 - 4 Argumentum ad verecundiam
-

15. Examine the following argument:

"I am the centre of my own universe, as when I gaze in wonder before the universe in its entirety I can only view it from my own vantage point."

Which fallacy could be said to be apparent?

- 1 Faulty analogy
- 2 Excluded middle
- 3 False dilemma

Quiz 2

Questions/activities

1. Complete the following statement making use of one of the options provided below:

“A straw man argument and a slippery slope argument are both fallacies of distraction. The difference, however, is that while the slippery slope leads one from sublime premises to an illogical conclusion, the straw man argument...

1 ... distracts one’s attention by distorting the original argument.”

2 ... distracts one’s attention by arguing in a circular manner.”

3 ... distracts one’s attention by using the same word in different senses.”

4 ... distracts one’s attention by combining two or more questions.”

2. Identify from the options provided below which best represents the structure of arguments of the fallacious kind affirmation of the consequent.

1 If P then Q

Not P

.Not Q

2 If P then Q

Not Q

.Not P

3 If P then Q

Q

.P

4 If P then Q

P

.Q

3. Match the structure of the argument in Column B to the argument type in Column A.

Column A: Argument type	Column B: Argument structures
A Modus ponens	(i) If P then Q <u>Q</u> .P)
B Invalid form of the Modus tollens	(ii) If P then Q <u>P</u> .Q
C Denial of the consequent	(iii) If P then Q <u>Not Q</u> .Not P
D Affirmation of the consequent	(iv) If P then Q <u>Not P</u> .Not Q

1 A: (i); B: (iv); C: (iii); D: (i)

2 A: (ii); B: (iv); C: (iii); D: (i)

3 A: (i); B: (iii); C: (iv); D: (ii)

4 A: (ii); B: (iii); C: (iv); D: (i)

4. Examine the following argument:

“If Thabiso represented the road show to educational transformation well, then educational transformation would flourish. Thabiso didn’t represent the road show to educational transformation well. Thus, educational transformation doesn’t flourish.”

Which structural fallacy is committed here?

1 Modus ponens

2 Invalid form of Modus ponens

3 Modus tollens

4 Invalid form of Modus tollens

Read through the following passage and answer questions 5 – 10 which follow. Each sentence has a letter after it, which are referred to in the questions that follow.

“A communist state is necessarily a failure! (a) Wherever the work force is institutionalised there can be no hope of either entrepreneurial development or of personal financial gain or advancement. (b) The possibility of individual expression is removed. (c) All people are viewed as identical workers of the state. (d) People hence become stuck as machines serving the greater machinery of the state. (e) Human greed – so despised by communists in capitalism – leads to dictators rising. (f) So, I ask you, have you ever met a happy person from a formerly communist country? (g) It seems fairly obvious that no communist party should be supported. (h)”

Argument analysis

5. What kind of argument could the aforementioned be classified as?
- 1 Inductive, empirical argument
 - 2 Inductive, value argument
 - 3 Deductive, empirical argument
 - 4 Deductive, value argument
-
6. There is an unspoken or assumed premise in the aforementioned argument. Which of the following could be the assumed premise?
- 1 All communists are abusers of the working class being no different to capitalists.
 - 2 Human nature prevents communism from working due to innate human greed.
 - 3 In supporting a communist party one supports a communist state arising.
 - 4 People are more valuable than simply being the state’s machinery.
-
7. Which fallacy is evident in this argument?
- 1 Argumentum ad hominem
 - 2 Hasty generalisation
 - 3 Circular reasoning
 - 4 Excluded middle
-
8. What is the main conclusion of the argument?
- 1 (h)
 - 2 (g)
 - 3 (a)

4 (f)

9. What is the sub-conclusion of the argument?

1 (a)

2 (h)

3 (b)

4 The argument has no sub-conclusion

10. Which statements lend support to the argument and can be identified as its premises?

1 (a), (b), (c), (d), (e), (f), (h)

2 (b), (c), (d), (e), (f), (g), (h)

3 (b), (c), (d), (e), (f), (g)

4 (a), (b), (c), (d), (e), (f), (g)

Carefully read the following argument, and then answer questions 11 – 15 which directly concern it.

“... woman is more compassionate than man, more easily moved to tears, at the same time is more jealous, more querulous, more apt to scold and to strike. She is, furthermore, more prone to despondency and less hopeful than the man, more void of shame or self-respect, more false of speech, more deceptive and of more retentive memory. She is also more wakeful, more shrinking, more difficult to rouse to action, and she requires a smaller quantity of nutriment” (Aristotle, in “The History of Animals”, Book IX, 1).

11. What kind of argument was Aristotle making?

1 A sound inductive argument

2 An unsound inductive argument

3 An empirical argument

4 A valid deductive argument

12. The argument above contains an unstated conclusion. Which of the following sentences best gives the conclusion of the argument?

1 Women are different from men in many ways.

2 Women are more compassionate than men.

3 Women are inferior to their masculine counterparts.

4 Women are less reliable than men.

13. What is this Aristotelian argument's main flaw?
- 1 This is a bad argument because all the premises are false.
 - 2 This is a bad argument because Aristotle discriminates against women.
 - 3 The conclusion reached by Aristotle is necessarily false.
 - 4 The argument is based entirely on hasty generalisations.
-

14. If you were writing an essay in **support** of Aristotle's opinions, which of the following statements would most strengthen your argument?
- 1 Studies have shown that women are more susceptible to emotional weakness than their male counterparts.
 - 2 There are very few women in leadership positions, which proves their unfitness for leadership.
 - 3 Women belong in the home because they are naturally better at household chores and childcare than men are.
 - 4 Men are physically and emotionally stronger than women and this proves that they are better human beings.
-

15. If you were writing an **opposing argument** to Aristotle's, which of the following statements would most strengthen your argument?
- 1 Men are able to replace punctured tyres, but are not able to cook anything.
 - 2 Men and women are equal human beings and should be treated equally.
 - 3 Without children, society would have no future. Women raise children, so our society would be nothing without women.
 - 4 Through the ages, women have always been home-makers and child-rearers.
-

16. Read through the following paragraph and identify the kind of writing illustrated by it.

"'If only,' he thought, as he looked out of the window, 'I had been in Pooh's house, or Christopher Robin's house, or Rabbit's house when it began to rain, then I should have had Company all this time, instead of being here all alone, with nothing to do except wonder when it will stop.' And he imagined himself with Pooh, saying, 'Did you ever see such rain, Pooh?' and Pooh saying, 'Isn't it awful, Piglet?' and Piglet saying, 'I wonder how it is over Christopher Robin's way,' and Pooh saying, 'I should think poor old Rabbit is about flooded out by this time.' It would have been jolly to talk like this, and really, it wasn't much good having anything exciting like floods, if you couldn't share them with somebody" (Milne, 1963:127).

- 1 Descriptive
- 2 Argumentative

3 Comparison and contrast

4 Narrative

17. Identify the writing type in the following extract from Bernard Lonergan's *Insight*:

"If one would understand, not men's notions of Space and Time, but the intelligibility immanent in Space and Time, then one must advance from reference frames to the geometrical principles and laws whose expression is invariant under transformations" (1970:171).

1 Argumentative

2 Descriptive

3 Comparison and Contrast

4 Narrative

18. Read the following excerpt which is taken from Tracey Rowland's work entitled

"Ratzinger's Faith: The Theology of Pope Benedict XVI":

"Ratzinger describes democracy as a 'daring experiment', and suggests that it would be absurd if it were extended to questions of truth, or of the good itself. As a result he fundamentally disagrees with... Hans Küng..." (2008:88).

What kind of writing is evident in this piece?

1 Comparison and contrast

2 Descriptive

3 Narrative

4 Argumentative

19. Examine the following extract and identify the type of writing illustrated from the options provided:

"There is, to be sure, a great difference between the general unanimity of science and the diversity of religions. But there is a considered response to this. We reach the peculiar agreement and intersubjectivity of natural science only when we deal with repeatable patterns in the natural world. Scientists have the luxury of gathering together in laboratories to share common, repeatable, and predictable experiences. It is no surprise that when we pose problems related to meaning and spiritual realities, it is more difficult to reach agreement" (Giberson & Artigas, 2007:41).

1 Narrative

2 Comparison and contrast

3 Argumentative

4 Descriptive

20. Read the following from the Time Magazine:

“It’s hard to imagine being Mary Parks, who three years ago unwittingly left her 23-month-old son, Juan, in her car while she went to work. With temperatures in the 80s that day, the baby didn’t stand a chance. But Parks’ horror story isn’t an anomaly. Last year, 49 U.S. children succumbed to heatstroke after being forgotten in hot cars.”

(Viewed on 14 June 2011, at: <http://healthland.time.com/2011/06/13/would-you-forget-your-babyin-a-hot-car/>)

What kind of writing could this be deemed as?

1 Comparison and contrast

2 Descriptive

3 Narrative

4 Argumentative

A rubric for assessing academic essays

(Adapted slightly from Murray and Johanson 1989:iv; DoE 2003:47).

Class	Mark	Content	Form	Language and vocabulary	Style
Outstanding	80%+	Excellent critical and conceptual analysis. Subject matter comprehensively and accurately presented. Well argued. Relevant reading effectively incorporated.	Excellent organized and presented. Argument concisely and systematically developed with a very well-thought out introduction and conclusion.	Standards of spelling, punctuation, vocabulary use and grammar are extremely high. Mistakes are rare. Handwriting is easily legible/word-processed documents are free of basic errors.	Use of language is entirely appropriate to context, function and intention.
Meritorious	70%+	Good critical and conceptual analysis. Subject matter effectively covered and accurately presented. Well argued. Relevant reading effectively incorporated.	Well organized and presented. Argument concisely and systematically developed with a well-thought out introduction and conclusion.	Standards of spelling, punctuation, vocabulary use and grammar are good. Few errors occur. Handwriting is legible/word-processed documents are mostly free of basic errors.	Use of language is appropriate to context, function and intention.
Satisfactory	60%+	Rather more descriptive than critical and conceptual. Although the analysis may lack clarity in parts, the student understands the subject matter fairly well. Evidence of relevant reading but not always effectively used.	Fairly well organized and presented. The writing is coherent and ideas are developed, but not always concisely or systematically. The report has an introduction and a conclusion but they may not be well integrated with the body of the essay.	Standards of spelling, punctuation, vocabulary use and grammar are reasonably accurate. Few errors occur. Handwriting is legible/word-processed documents are mostly free of basic errors.	Slight limitation of style and mastery of appropriate idiom.
Adequate	35-41	Perfunctory and largely descriptive. Understanding of subject matter is incomplete. Little evidence of reading.	Organization and presentation acceptable. An attempt has been made to develop an argument but is rather unsystematic and sometimes contains redundant and/or irrelevant material. An attempt has been made to write an introduction and conclusion but they may bear little relation to the body of the report.	The report is intelligible but contains a fair number of errors in spelling, punctuation, vocabulary and use and grammar. Handwriting is legible/word-processed documents may have some basic errors.	Use of style and conveyance of tone is present but not consistent.
Partially	50%+	Perfunctory. Almost entirely descriptive.	Organization and presentation poor.	The report is not always intelligible.	Stylistically poor and frequently

achieved		Narrow in conception. Little evidence of understanding of reading. Contains inaccuracies. May have misinterpreted the task.	Little attempt has been made to develop an argument. There is redundant and/or irrelevant material. The introduction and conclusion, if they exist at all, are weak.	There are frequent errors of spelling, punctuation, vocabulary use and grammar. Handwriting may be difficult to read/word-processed documents may not be well formatted.	inappropriate.
Inadequate	49% and below	Very little evidence of understanding or of reading. Contains serious inaccuracies. May have misinterpreted the task.	Organization and presentation very poor. No attempt has been to develop an argument. Much redundancy and irrelevant material. Often no introduction or conclusion.	The report is frequently unintelligible. There are many errors of spelling, punctuation, vocabulary use and grammar.	Stylistically very poor and frequently inappropriate.
Fail	0	1. Plagiarism or 2. Task not done or 3. Has disregarded the task entirely.			