

South Central College

CRTK 100 Critical Thinking

Course Outcome Summary

Course Information

Description This course helps students acquire and develop critical thinking skills. Focused on

the practical application of the principles of good reasoning, it encourages them to cultivate cognitive virtues such as consistency, self-awareness, open-mindedness, fairness, and intellectual humility. Students will be taught how to: recognize (and make) good arguments, identify (and avoid) logical fallacies and cognitive biases. articulate ideas in a clear and precise way, understand the significance and limits of the scientific method, and critically evaluate sources in the media. (Prerequisites: Must have a score of 78 or higher on the Reading portion of the Accuplacer test or

completion of READ0090 with a C or higher) (MNTC: 2 Critical Thinking)

Total Credits 3 **Total Hours** 48

Types of Instruction

Instruction Type Credits/Hours

3.00/48.00 Lecture

Pre/Corequisites

Must have a score of 78 or higher on the Reading portion of the Accuplacer test or completion of READ0090 with a C or higher

Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Explain the concept of "critical thinking."

Learning Objectives

Define "critical thinking" and explain how it differs from "careless (or egocentric) thinking." Identify the intellectual virtues which critical thinkers possess.

Explain the scope, relevance and benefits of critical thinking.

Evaluate whether we have the obligation to be rational and reason well.

2. Analyze arguments to determine whether they are valid or strong.

Learning Objectives

Explain the difference between logical argumentation and persuasion.

Distinguish between arguments and non-arguments (including mere assertions).

Recognize the difference between deductive and inductive arguments and the areas of inquiry which are more suited for each.

Distinguish valid from invalid arguments and strong from weak arguments.

Identify the most popular forms of valid arguments and invalid arguments.

3. Recognize common forms of logical fallacies.

Learning Objectives

Describe the difference between logically invalid arguments and arguments which commit informal logical fallacies.

Recognize the most frequently abused informal logical fallacies.

Identify the most commonly committed logical fallacies in media and politics.

Evaluate when we can rightly appeal to authority to warrant rational belief.

4. Recognize common forms of cognitive bias.

Learning Objectives

Describe the nature and causes of cognitive biases.

Recognize common forms of cognitive bias.

Identify ways to counteract cognitive biases.

Evaluate the degree to which their [students'] own thinking is distorted by cognitive biases.

5. Identify assumptions and hidden premises in arguments.

Learning Objectives

Identify the unstated assumptions behind particular arguments.

Articulate the difference between properly basic beliefs, inferentially justified beliefs, and mere assumption.

Identify unexamined assumptions in their [students'] own thinking.

Evaluate those assumptions to determine whether they are warranted.

6. Explain the importance of conceptual clarity.

Learning Objectives

Distinguish between clarity and ambiguity on a conceptual and linguistic level.

Revise unclear statements to make them more clear and precise.

Explain ways in which lack of clarity can intentionally or unintentionally obstruct critical thinking.

Explain why apparent disagreement is often due to a failure of people to understand one another (e.g., merely verbal disagreements).

Analyze the limits of lexical (dictionary) definitions in resolving disputes about meaning.

7. Analyze different concepts of "truth" and debates about its significance.

Learning Objectives

Explain the categorical difference between facts and opinions and justified true beliefs.

Distinguish between reality and socially constructed representations of reality.

Compare and contrast objective, subjective and inter-subjective truth.

Evaluate whether we know as much as we assume or if we're too confident in our beliefs.

8. Describe the nature, capacity and limits of the scientific method.

Learning Objectives

Define the scientific method and the ways in which it differs from other methods of obtaining knowledge.

Explain why science is a systematic, self-correcting process which serves as an exemplar of critical thinking.

Differentiate between science, nonscience, bad science and pseudoscience.

Recognize the limits of scientific inquiry and the value of other methods of obtaining knowledge.

Demonstrate a basic understanding of probability and reasons why people do a poor job of estimating the likelihood of events.

9. Evaluate different sources of information (especially the media and websites) to determine their legitimacy.

Learning Objectives

Define the concept of "objectivity" as it relates to the media and the effects of biased (e.g., emotive) framing. Distinguish between "critical" and "careless" media consumption.

Analyze Internet sources to determine the degree and direction of their bias.

Differentiate between an ad hominem attack and warranted suspicion based on a source's motivations.

Recognize examples of the rational use of statistics and ways in which statistics are abused in reporting.

10. Recognize and employ the intellectual virtues.

Learning Objectives

Define the nature of an intellectual virtue.

Analyze when we have the obligation to suspend judgment.

Evaluate evidentialism and the proportioning of credence to the degree of available evidence.

Recognize the proper balance between intellectual humility and intellectual courage, perseverance and firmness.

Assess when open-mindedness is a virtue and when it can lead to excessive credulity.

Explain the principle of charity and how it applies to our reasoning with others.

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

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