

Soft-Train



*At Soft-Train
Technology Works*

Critical Thinking (2 Days) ST00001

COURSE GOAL: To prepare the students to understand the various components of Critical Thinking

PREREQUISITES: None.

LEARNING OBJECTIVES:

Upon completion of this course the student will be able to:

- Be able to distinguish between Realism, Relativism and Nihilism.
- Avoid some common mistakes.
- Clarify Meanings
- Identify Sufficient Reasons
- Recognize reasoning by Analogy

KEY TOPICS:

I. The Nature and Value of Critical Thinking

- A. The Nature of Critical Thinking
- B. Critical Thinking and Knowledge
- C. Truth: Realism, Relativism, and Nihilism
- D. Relativism and the Argument from Disagreement
- E. Belief and Justification
- F. Emotional and Pragmatic Reasons
- G. Epistemic Reasons
- H. When Evidence Conflicts
- I. Critical Thinking and Personal Autonomy
- J. Belief and Prejudice
- K. Making Up Your Own Mind
- L. Mistakes to avoid
- M. Practical Strategies

II. Clarifying Meaning

- A. Definitions in Critical Thinking
- B. Assertions
- C. Propositions
- D. Constructing and Evaluating Definitions
- E. Slogan
- F. Necessary and Sufficient Conditions
- G. Narrow and Broad Definitions

- H. Definitions in Practical Life
- I. Expand, Example, and Contrast
- J. Thinking Critically about Frameworks
- K. Clarifying Beliefs and Problems
- L. Technical Definitions
- M. Meaning in Advertisements
- N. Mistakes to Avoid
- O. Practical Strategies

III. Sufficient Reasons

- A. Critical Thinking and Arguments
- B. Identifying Premises and Conclusions
- C. Dependent and Independent Reasons
- D. The Words Test
- E. The False Premise Test
- F. Circumstantial Reasons
- G. Sub-arguments
- H. Evaluating Logical Support
- I. Missing Premises
- J. Practical Strategies

IV. Acceptable Reasons

- A. Reliable Evidence
- B. Undermining and Overriding Evidence
- C. Observation
- D. Memory
- E. Testimony
- F. Advertising
- G. News Reports
- H. Measurement
- I. Surveys
- J. Mistakes to Avoid

- K. Practical Strategies

V. Reasoning About Alternatives and Sufficient Conditions

- A. Alternatives
- B. Disjunctions
- C. Criticizing Reasoning about Alternatives
- D. Necessary and Sufficient Conditions
- E. Valid and Invalid Forms of Reasoning
- F. Making it Explicit
- G. Reasoning with Definitions and Standards
- H. Reasoning with Causal Claims
- I. Discovering Necessary and Sufficient Causal Conditions
- J. Concomitant Variation
- K. Experimenting and Simulating
- L. Mistakes to Avoid
- M. Practical Strategies

VI. Reasoning By Analogy

- A. The Validity of Reasoning by Analogy
- B. Relevant Similarity
- C. Representational Analogy
- D. Reasoning with Samples
- E. Reasoning with Models and Maps
- F. Mistakes to Avoid

VII. Critical Thinking Through Action

- A. Thinking Critically About a Discipline
- B. Critical Thinking Questions

- C.** Thinking Critically in Your Own Decision Making
- D.** Clarifying Views and Reasons
- E.** Identify and Respond to Alternatives
- F.** Thinking Critically in Discussions
- G.** Asking Open-Ended Clarification Questions
- H.** Withholding Disagreement and Agreement
- I.** Keeping Emotional Distance
- J.** Mistakes to Avoid
- K.** Practical Strategies