

Coffeyville Community College

HUMN-218

COURSE SYLLABUS

FOR

LOGIC AND CRITICAL THINKING

Jill R. Wood

Instructor

COURSE NUMBER: HUMN-218 **COURSE TITLE:** Logic and Critical Thinking

CREDIT HOURS: 3

INSTRUCTOR: Jill R. Wood

OFFICE LOCATION: Available as needed

OFFICE PHONE: None

HOME PHONE: 620-251-7125

CELL PHONE: None

OFFICE HOURS: Available as needed

E-MAIL: jrwood73@hotmail.com

REQUIRED TEXT AND RESOURCES: Kirby, G.R., & Goodpaster, J.R. (2007). *Thinking* (4th ed.). Upper Saddle River: Pearson Education, Inc.

COURSE DESCRIPTION: This course is a basic introduction to both deductive and inductive reasoning. Emphasis is placed on identifying, analyzing, and constructing arguments. It examines the logical structure of English sentences, determining validity, examining premises, and using a symbolic system which models logical relations among sentences. Special emphasis will be placed upon the logical appraisal of everyday arguments and the analysis of value arguments.

EXPECTED LEARNER OUTCOMES: Upon successful completion of this course, the student should be able to:

1. Define logic and explain how categorical and hypothetical syllogisms and different fallacies can use critical thinking to solve logic questions.
2. Explain what can aid or hinder our critical thinking process.
3. Explain three different types of thinking that can either use or influence the critical thinking process.
4. Discover how the critical thinking process is used to solve problems, evaluate solutions, make decisions which lead to action, and to challenge the student to go on sharpening critical thinking skills.

**LEARNING TASKS
AND ACTIVITIES:**

- Introduction: What is thinking?
- How does logic aid in critical thinking?
 - Categorical syllogisms
 - Hypothetical syllogisms
 - Fallacies
- What aids and hinders our thinking?
 - Personal barriers
 - Senses
 - Brain and memory
 - Language
 - Feelings
 - Organization
- What are some different types of thinking?
 - Creative
 - Scientific
 - Persuasive
- What is used to test our thinking?
 - Problem solving
 - Evaluating
 - Decision and action
 - Challenging our thinking

This course is online. The student will be responsible for discussion board questions, quizzes, writing papers, homework, and a test in order to evaluate learning. Since this is an online course, the student's participation is crucial. A variety of assignments are due; therefore, it is vital that the assignments are completed on time, so the student does not fall behind.

**ASSESSMENT OF
OUTCOMES:**

The grade for this course will be determined by the number of points the student has earned during the semester.

Discussion Board:

The discussion board questions are to be answered in a timely manner. Ten discussion board questions will be asked. Most questions will ask the student to respond to other postings in order to create a discussion, since no discussion will actually take place in a classroom setting. The ten discussion board questions and the responses will each be worth 10 points each, for a total of 100 points for the discussion board.

Please note: The discussion board should be viewed as if the students were sitting in class having a discussion with the teacher. Therefore, the language used should be professional, use correct grammar, no slang or cursing, and no demeaning of students. All text can be read by all users of the classroom, so please keep personal comments off of the classroom website. College is used to prepare students for the working environment, so we will use the class website accordingly.

Homework:

Four homework assignments will be given over the logic portion of this class. Each assignment will be worth 25 points each, for a total of 100 points.

Activities:

Activities will be assigned that involve critical thinking skills. The activities are meant to be fun, but they will also strengthen deductive reasoning. Ten activities will be assigned. Each activity will be worth 10 points each for a total of 100 points for the activities.

Assessments:

Five quizzes will be given throughout the semester over the textbook content. The topics discussed on the quizzes will also be used on the final test, so the quizzes are very important. Five quizzes will be worth 20 points each for a total of 100 points. The final will be worth 100 points. The final will include similar questions from both the quizzes and the homework assignments over logic.

Papers:

Two papers will be required during the semester to evaluate the student's critical thinking process and communication skills. Each paper will be worth 100 points, for a total of 200 points.

GRADING:

The total number of points possible during the semester is 700 points. The assessment will include discussion board questions, homework, critical thinking activities, quizzes, two papers, and a final.

A grade of Incomplete (I) will be given to a student only under special conditions, and only after the instructor has cleared it through the Interim Vice President for Academic Services. A specified time period will be given for the student to complete the course work.

The following grading scale will be used to determine the overall course grade:

100% - 90% = 700 – 630 points = A

89% - 80% = 629 – 560 points = B

79% - 70% = 559 – 490 points = C

69% - 60% = 489 – 420 points = D

59% and below = below 419 points = F

LATE ASSIGNMENTS: The WebCT course is date and time specific. Therefore, all work must be submitted on time via the quizzes, the test, and discussion boards online. The homework, papers, and activities must be e-mailed to the instructor on or before the due date and time. **Since this is an online course, extensions for college activities should not need to be granted.** Assignments can be completed before an activity any time during the week. The quizzes and tests, especially, need to be completed on time.

**ATTENDANCE
ONLINE:**

Formal attendance will not be taken; however, each student must post their original discussion board questions on time, so that the other students may respond to the postings in a timely manner.

PLAGIARISM:

Academic honesty and integrity are both highly viewed by the instructor. The instructor wants to hear the student's opinion about critical thinking issues and not the views of someone else. Besides writing papers, quizzes and the test must reflect academic integrity.

ADDITIONAL NOTES:

Questions from the student are welcome at any time. The primary method for students who need to ask questions should be by e-mail. The instructor will also be available by phone or by appointment when necessary.

COMPETENCIES:

DEFINE LOGIC AND EXPLAIN HOW CATEGORICAL AND HYPOTHETICAL SYLLOGISMS AND DIFFERENT FALLACIES CAN USE CRITICAL THINKING TO SOLVE LOGIC QUESTIONS.

1. Categorical syllogisms include a major premise, a minor premise, and a conclusion. Learn which parts can be either valid or invalid. Learn which parts can be either true or false.
2. Hypothetical syllogisms take the “if-then” form. They can either be valid or invalid. Learn two valid forms and two invalid forms.
3. Informal deductive fallacies and informal inductive fallacies will be discussed in detail. Other reasoning fallacies will also be covered.

EXPLAIN THREE DIFFERENT TYPES OF THINKING THAT CAN EITHER USE OR INFLUENCE THE CRITICAL THINKING PROCESS.

1. Personal barriers include enculturation, self-concept, ego defenses, and emotional influences, and stress.
2. Senses can aid and hinder our critical thinking. The most important sense for critical thinking is listening.
3. The brain can aid or hinder our critical thinking by increasing or decreasing our memory potential. Some outside influences can influence our memory also, they include: food, drugs, and sleep. Some ways are given to help increase memory.
4. Mastering the language used mostly to communicate, for example, English, will increase critical thinking, but not having a complete grasp on communication can hinder critical thinking.
5. Feelings can aid or hinder our critical thinking. Our cultural context including family, church, and business can influence our feelings.
6. Organization can aid or hinder our critical thinking. Four types of natural orders are given. Five steps in organizing are covered.

EXPLAIN THREE DIFFERENT TYPES OF THINKING THAT CAN EITHER USE OR INFLUENCE THE CRITICAL THINKING PROCESS.

1. Creative thinking includes metaphorical thinking, brainstorming, and starbursting. Five steps are given for coaxing creativity.
2. Scientific thinking includes the four steps to the scientific method, including observation, hypothesis formulation, experimentation, and verification.
3. Persuasive thinking involves thinking about what moves the individual as well as the audience. Five steps for organizing persuasion are given. Three categories of different persuasive techniques are given; they include manipulative tactics, erroneous attacks, and abuse of language.

DISCOVER HOW THE CRITICAL THINKING PROCESS IS USED TO SOLVE PROBLEMS, EVALUATE SOLUTIONS, MAKE DECISIONS WHICH LEAD TO ACTION, AND TO CHALLENGE THE STUDENT TO GO ON SHARPENING CRITICAL THINKING SKILLS.

1. Problem solving has several different steps. First, one must define the problem; next, one must remove any barriers; then, one must generate possible solutions; after several solutions are generated, one must select a solution to work with; finally, one must evaluate and monitor the solution.
2. Evaluating, or testing, is that final step in the scientific method, and it must also be the final step in processing our critical thinking methods. Several different tests are mentioned in order to help us evaluate our critical thinking methods.
3. Decision and action must be present in order to test our thinking. Several difficulties in deciding are given in order to help us focus our decisions. How and when to decide are also discussed. Action must then follow after a decision has been made. Action completes thinking.
4. The challenge to go on thinking is a reminder to us that thinking does not stop at the end of a book, a course, a project, etc. We will continue thinking as long as we live, but how we make use of our thinking skills is now up to the individuals.