ROSE STATE COLLEGE

Division Course Syllabus

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<th>Division</th>
<th>Humanities</th>
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<tr>
<td>Course Prefix and Number</td>
<td>PHIL 2113</td>
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Course Title: Introduction to Logic and Critical Thinking  
Semester and Year Submitted: Fall 2013  
Credit Hours: 3  
Prepared by: Antoinette Castillo  
Hours Per Week: Class 3  
Lab 0  

Course Description (as it appears in Catalog)

This course directs attention to the difference between correct and incorrect reasoning, with particular emphasis on how people reason badly in popular culture, the media, and everyday life. The course is predominantly concerned with deduction, although segments are also included on informal fallacies, induction, and the uses of language in argument. May be taken as Humanities credit for General Education requirements. Prerequisite: READ 1213 or equivalent.

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<th>Prerequisites</th>
<th>READ 1213 or equivalent</th>
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<tr>
<td>Text(s):</td>
<td>The Power of Critical Thinking: Effective Reasoning About Ordinary and Extraordinary Claims, 4th edition</td>
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<tr>
<td>Author</td>
<td>Lewis Vaughn</td>
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<tr>
<td>Publisher</td>
<td>Oxford University Press</td>
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<tr>
<td>Copyright Date</td>
<td>2012</td>
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<tr>
<td>ISBN #</td>
<td>9780199856671</td>
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<td>Reading Level</td>
<td>13</td>
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Supplemental Materials: (Other books, audio visual aids, etc.)  
None
Outline for Remainder of Syllabus:

Rationale:
In the face of a rapidly changing world, there is no more necessary skill than the ability to think clearly. In addition, a free and democratic society can flourish only among a people who can reason correctly about issues and opinions, their own and those of others. An introductory logic course is designed to fill both these needs. It considers problems surrounding definitions and the uses of language, the two principal types of reasoning--deduction and induction, and the most common fallacies found in reasoning and argumentation. The course is designed to enable the student to think and reason more clearly and enable the student to recognize the difference between valid and invalid reasoning in argumentation generally.

Expected Outcomes:
Upon completion of the course, students should
1. Have an understanding of the function of critical thinking and the uses of logic in their everyday lives and culture.
2. Be able to recognize and evaluate the principal types of logical arguments.
3. Be able to recognize and respond to the principal types of logical fallacies.
4. Understand the basic principles of both deductive and inductive reasoning.

Methods of Instruction:  (Methods of instruction will vary with each instructor. )
Lecture and Discussion
Internet or Computer Based Instruction
Individualized Approach: There is a serious effort made to understand the level of logical thinking on the part of each student as s/he enters the class, and an attempt is made to develop each student's skill in logical thinking.

Assessment (including critical thinking measurements):
Students will be required to demonstrate their knowledge of the course content, as identified in the learning goals, on written examinations, oral presentations or projects. The grades of the students will be assigned based on a predetermined scale.
Suggested:  
60 % Written examinations over course content
40 % Twelve one-to- two page analytic writings connecting course material to everyday life, popular culture, and the media

Learning Objectives:
Unit 1: Understanding the Basic Components of Argument and Critical Thinking  
(outcomes 1, 2, 4)

On a written examination, students will demonstrate that they can do the following:
1. Differentiate between discourse that does and does not present an argument.
2. Identify the individual basic structures of an argument.
3. Distinguish between language that does and does not exhibit psychological obstacles to reasoning.
4. Distinguish between deductive and inductive arguments, determine whether arguments are valid or invalid, sound or cogent.
5. Diagram more complex arguments.
Through essay writing, students will demonstrate that they can identify arguments in their own lives or larger culture, and evaluate the effectiveness of the use of language and logic in those arguments.

**Unit 2: Understanding How to Evaluate Claims and Evidence, Rhetorical Devices, and Identify Logical Fallacies (outcomes 1, 3, 4)**

On a written examination, students will demonstrate that they can do the following:
1. Examine claims to identify whether they are sound or whether they suffer from problems with conflicting claims.
2. Be able to define the major logical fallacies through matching or short answer.
3. Examine arguments to identify specific fallacies operating in them.

Through analytic writings, students will identify conflicting claims and evidence, and the use of logical fallacies and illogical rhetorical devices in their own lives or larger culture.

**Unit 3: Understanding the Purposes and Uses of Propositional Logic and Categorical Logic (outcomes 1, 2, 3, 4)**

On a written examination, students will demonstrate that they can do the following:
1. Identify the meaning of symbols in propositional logic, and use those symbols to construct arguments.
2. Distinguish between arguments using conjunction, disjunction, negation, and the conditional.
3. Evaluate arguments for validity by constructing truth tables.
4. Define the major components used in categorical logic.
5. Translate ordinary and singular statements into standard categorical form.
6. Diagram categorical statements and size up categorical syllogisms.

Through analytic writings, students will demonstrate that they can identify deductive arguments in their own lives or larger culture, and evaluate the effectiveness of the use of arguments using the techniques of propositional and categorical logic.

**Unit 4: Understanding Inductive Reasoning (outcomes 1, 2, 4)**

On a written examination, students will demonstrate that they can do the following:
1. Identify and use enumerative and analogical induction.
2. Identify and critique various types of causal arguments.
3. Identify instances of inference in arguments and evaluate their use in reasoning to the best explanation.
4. Use criteria of adequacy to evaluate the adequacy of theories in areas of culture, especially in the realms of scientific and legal theory.

Through analytic writings, students will demonstrate that they can identify and evaluate uses of inference in arguments in their own lives or larger culture.