Course Inventory Change Request

New Course Proposal

Date Submitted: 02/12/15 1:03 pm

Viewing: PHIL 2900: Symbolic Logic: The Study of Formal Reasoning

Last edit: 02/13/15 9:40 am

Changes proposed by: flarger

Course Prefix: PHIL
Course Number: 2900
Effective Semester: Spring 2016
Department: Humanities (HUM)
School: School of Humanities
Course Title:

Symbolic Logic: The Study of Formal Reasoning

Short Course Title: Symbolic Logic

Credits: 3
Workload Factors: 3
Primary Grade Type: Standard Letter
Secondary Grade Type: 
Instructor: No

In Workflow

1. HUM Chair
2. HUM Admin
3. HUM Dean
4. University Curriculum Committee Chair
5. Banner

Approval Path

1. 02/12/15 2:33 pm
   Melanie Hinton (melanie.hinton):
   Approved for HUM Chair
2. 02/13/15 1:10 pm
   Lory Mattucci (mattucci):
   Approved for HUM Admin
3. 02/19/15 11:25 am
   Addison Everett (everet_a):
   Approved for HUM Dean
Permission Required: No
Repeatable for Credit: No
Schedule Type: Lecture Hrs/Wk: 3
Catalog Prerequisites? No
Corequisites? No
Course/Lab Fee? No
Instruction Index Code: SOC208
GE Status Requested: No

Catalog Description
An introduction to the study of formal reasoning, with an emphasis placed on discussions of validity and deductive arguments. Besides preparing students for advanced studies (like law school) the study of argument construction also improves critical thinking, research, and writing skills. The study of logic aids in both qualitative and quantitative thought, which can prove an aid for the college experience.

Course Rotation:
Spring (every)

Justification for course/change:
While on the surface, this course may appear similar to the “Critical Reasoning and Rational Decision Making” (Phil 1250) course offered at DSU. As a 1000 level course, this critical reasoning course focuses more on basic argument construction, informal fallacies, and introducing students to philosophical claims. A symbolic logic course is necessary to instruct students on the formal study of argument development and construction, and the systematic reasoning that comes from examining these arguments. This course will focus on deductive logic (Phil 1250 does not) and traditional means of identifying validity (Venn Diagrams, Truth Tables, Syllogisms, formal proofs). Symbolic Logic will also be a component in the proposed Pre-law minor.

Library Resources Adequate: Yes
Tech Resources Adequate: Yes

Comparable Courses:
(use USHE course first)
<table>
<thead>
<tr>
<th>Institution</th>
<th>Prefix/Number</th>
<th>Credit(s)</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Utah</td>
<td>PHIL 3200</td>
<td>3</td>
<td>Deductive Logic</td>
</tr>
<tr>
<td>Brigham Young University</td>
<td>PHIL 305</td>
<td>3</td>
<td>Intermediate Formal Logic</td>
</tr>
<tr>
<td>Utah Valley University</td>
<td>PHIL 3000</td>
<td>3</td>
<td>Formal Deductive Logic</td>
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<tr>
<td>Weber State University</td>
<td>PHIL 2200</td>
<td>3</td>
<td>Deductive Logic</td>
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<tr>
<td>Truman State University</td>
<td>PhRe 342</td>
<td>3</td>
<td>Symbolic Logic</td>
</tr>
</tbody>
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Course Learning
Outcomes:
After completing the course, students will be able to:
1. Identify argument forms in ‘statement logic’ and utilize tests such as truth tables and proofs to determine the validity of the argument.
2. Understand the structure and purpose behind categorical arguments, including the historical significance of such arguments.
3. Pinpoint informal fallacies found from various media sources and respond to such fallacies in articulate, constructive ways.

How do your Course Learning Outcomes align to your Program Learning Outcomes?
According to the American Philosophical Association, “The basic aim of education in philosophy is not and should not be primarily to impart information. Rather it is to help students learn to understand various kinds of deeply difficult intellectual problems, to interpret texts regarding these problems, to analyze and criticize the arguments found in them, and to express themselves in ways that clarify and carry forward reflection upon them.” The Proceedings and Addresses of the American Philosophical Association 69:2, pages 94-95.

Symbolic Logic provides a foundation for approaching, interpreting, analyzing, and criticizing arguments in contemporary and historical texts. It is so important to the discipline that finding a university that does not offer such a class is a rarity. As DSU continues to find its identity as a university, we must offer courses that give key elements of study in a discipline. Symbolic Logic does this. It gives students tools needed to approach ‘big idea’ issues, per the humanities PLO.

Schedule of lesson activities that meet Course Learning Outcomes
Unit 1: Categorical Logic
(Introduction to validity, syllogisms, and Aristotelian Logic)
Unit 2: Statement Logic
(Truth Tables, basic logic symbolization)

Unit 3: Proofs
(Introduction to Complex argument, Introduction to first order Logic)

Assessment activities
that provide
evidence of student
learning

Each semester will contain the following:
1. Three exams, each covering a single ‘unit’ of material covered over the semester. These exams will contain problems that parallel the unit being covered. For example, Unit 1 exams will have ask students to solve syllogisms using both long and short methods.
2. Weekly quizzes consisting of short answer questions. Such quizzes allow the instructor to correct and reinforce students’ practice and retention habits.