Proposal Form For Addition And Revision Of Courses

1. Proposed College / School: CLA
   Department: Philosophy

2. Course Prefix and Number: PHIL 1110

3. Effective Term: Fall 2013

4. Course Title: Philosophy of Science and Critical Thinking
   Abbreviated Title (30 characters or less):

5. Requested Action:
   - [ ] Renumber a Course
   - [ ] Add a Course
   - [ ] Revise a Course
   - Current Course Number:
   - Proposed Course Number:
   - Type of Revision:

6. Course Credit:
   Maximum Hours (Repeatability): 3
<table>
<thead>
<tr>
<th>Contact/Group Hours</th>
<th>Scheduled Type (e.g.: Lab, Lecture, Practicum, Directed Study)</th>
<th>Weekly or Per Term?</th>
<th>Credit Hours</th>
<th>Anticipated Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Lecture</td>
<td>weekly</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Credit Hours: 3

7. Grading Type:
   - [ ] Regular (ABCDF)
   - [ ] Satisfactory/Unsatisfactory (S/U)
   - [ ] Audit

8. Prerequisites/Corequisites:

   Use "P:" to indicate a prerequisite, "C:" to indicate a corequisite, and "P/C:" to indicate a prerequisite with concurrency.
   none

9. Restrictions: List specific restriction in space above.
   - [ ] College
   - [ ] Major
   - [ ] Standing
   - [ ] Degree

10. Course Description:
   (20 Words or Less; exactly as it should appear in the Bulletin)
   A survey of critical thinking techniques that play a role in scientific reasoning, including logic, decision theory, probability theory, causal reasoning, and theory confirmation.

11. May Count Either:
    (Indicate if this particular course cannot be counted for credit in addition to another)
    - [ ] Program Type
    - [ ] Program Title
    - [ ] Requirement or Elective?

12. Affected Program(s):
    (Respond "N/A" if not included in any program; attach memorandum if more space is required)
    | Program Type | Program Title |
    |--------------|---------------|
    | N/A          |               |

13. Overlapping or Duplication of Other Units' Offerings:
    (If course is included in any other degree program, is used as an elective frequently by other unit(s), or is in an area similar to that covered by another college/school, attach correspondence with relevant unit)
    - [ ] Applicable
    - [ ] Not Applicable
14. Justification:

This course fills a current gap in core offerings, covering critical thinking more generally than other offerings and philosophy of science more specifically. Both areas are represented in the current list of SLOs for general education at Auburn.

(Include a concise, yet adequate rationale for the addition/revision of the course, citing accreditation, assessments (faculty, graduate, and/or external) where applicable)

15. Resources:

Not Applicable

(Indicate whether existing resources such as library materials, classroom/laboratory space, and faculty appointments are adequate to support the proposed addition/revision; if additional resources are required, indicate how such needs will be met, referencing the appropriate level of authorization -- i.e.: Dean -- where necessary; if no additional resources or shifting of resources will be necessary, respond "Not Applicable")

16. Student Learning Outcomes:

1. Students will be able to recognize good and bad reasoning; in particular students should be able to evaluate the relationship of premises/evidence and conclusions.
2. Students will learn to apply basic logical and statistical skills to ordinary problems.
3. Students will have an understanding of scientific reasoning and its complexity.

(State in measurable terms (reflective of course level) what students should be able to do when they have completed this course)

17. Course Content Outline:

Week 1
Topic: Introduction to Critical Thinking
Assignments: Read sections 1.I-1.VI of Merrilee Salmon, Introduction to Logic and Critical Thinking (all readings are from this text)

Week 2
Topic: The Language of Arguments
Assignments: Read sections 2.I-2.VI

Week 3
Topic: Deduction, Induction, and Fallacies
Assignments: Read sections 3.I-3.V, 1st Exam

Week 4
Topic: Sentential Logic
Assignments: Read sections 8.I-8.IV

Week 5
Topic: Sentential Logic (cont.)
Assignments: Read sections 8.V-8.X

Week 6
Topic: Categorical Logic
Assignments: Read sections 9.I-9.IV

Week 7
Topic: Categorical Logic (cont.)

Week 8
Topic: Inductive Reasoning
Assignments: Read sections 4.I-4.VII

Week 9
Topic: Probability Theory and Inductive Reasoning
Assignments: Read sections 6.I-6.II

Week 10
Topic: Decision Theory and Inductive Reasoning
Assignments: Read sections 6.II-6.IV, 3rd Exam

Week 11
Topic: Causal Reasoning
Assignments: Read sections 5.I-5.III

Week 12
Topic: Causal Reasoning (cont.)
Assignments: Read sections 5.IV-5.VII

Week 13
Topic: Theory Confirmation
Assignments: Read sections 7.I-7.III

Week 14
Topic: Theory Confirmation
Assignments: Read sections 7.IV-7.VII., 4th Exam

Exam Period
Assignment: Comprehensive Final Exam

(Provide a comprehensive, week-by-week breakdown of course content, including assignment due dates)

18. Assignments / Projects:

Exam 1 assesses for an understanding of the basic concepts employed in evaluating good and bad reasoning (e.g., validity, soundness, deduction, induction, fallacy, and so forth).
Exam 2 assesses for a student's ability to recognize good and bad deductive reasoning and to apply those skills to ordinary problems.
Exam 3 assesses for a student's ability to recognize good and bad inductive reasoning, including the application of probability theory and decision theory to ordinary problems.
Exam 4 assesses for a student's understanding of scientific reasoning and the experimental method.
The Final Exam assesses for all student learning outcomes articulated in field 16, in part by assessing for a student's understanding of how scientific reasoning is related to other aspects of critical thinking and logic.

(List all quizzes, projects, reports, activities and other components of the course grade -- including a brief description of each assignment that clarifies its contribution to the course's learning objectives)

19. Rubric and Grading Scale:

1st exam: 150 points
2nd exam: 150 points
3rd exam: 150 points
4th exam: 150 points
Final: 300 points

Attendance (including 10 points lost for each unexcused absence beyond 2, and the instructor's professional assessment of the student's preparation and participation for each class session): 100 points

Scale
A: 900 points and above
B: 800 to 899 points
C: 700 to 799 points
D: 600-699 points
F: below 600 points

(List all components of the course grade -- including attendance and/or participation if relevant -- with point totals for each; indicate point totals and ranges or percentages for grading scale; for S/U grading, detail performance expectations for a passing grade)

20. Justification for Graduate Credit:
(Include a brief statement explaining how the course meets graduate educational standards (i.e.: rigorous standards for evaluation, development of critical thinking and analytical skills, etc.))

(Included below are standard statements regarding course policies. If necessary, a statement may be altered to reflect the academic policies of individual faculty members and/or the academic unit or department, provided that there is no conflict with the Student Policy eHandbook, Faculty Handbook, or any existing university policy.)

POLICY STATEMENTS

Attendance: Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence.

Excused Absences: Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student's immediate family, the death of a member of the student's immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request, and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please consult the Student Policy eHandbook for more information on excused absences.

Make-Up Policy: Arrangement to make up a missed major examination (e.g., hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absence(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up exam will take place within two weeks of the date that the student initiates arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.

Academic Honesty Policy: All portions of the Auburn University student academic honesty code (Title XII) found in the Student Policy eHandbook will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Disability Accommodations: Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2096 (V/TT).
Approvals

Michael W. D. [Signature]
Department Chair / Head
Date: 2/6/13

David L. Smith [Signature]
College / School Curriculum Committee
Date: 2/11/2013

[Signature]
College / School Dean
Date: 2/11/2013

Dean of the Graduate School (for Graduate Courses)
Date

Assoc. Provost for Undergraduate Studies (for Undergraduate Courses)
Date

Contact Person: __________________________ Telephone: __________________________
E-Mail Address: __________________________ Fax: __________________________