Course Overview

In this course, we will examine the processes and practices of inquiry and argumentation by considering the logic that underlies them. In the first part of the course, we will consider the phenomenology of inquiry, the structure of arguments, the role of guesswork (abduction), and the practices of communicative action. In the second part, we will study the basics of Aristotelian logic, the limits of the syllogism and the implications of these limits for inductive inquiry. In the final section, we will consider the idea of ordered systems and formal logic and will conclude with a discussion of the role of agency in logic and its implications for a normative theory of argumentation and what it means to be rational.

Course objectives: Upon completion of this course, you will have developed both a facility with and understanding of formal and informal logic, but also an understanding and appreciation of their deep connections to the rational processes of life in a community.

This course satisfies the logic requirement for a major in philosophy.

Course Text

The primary course text, *Logic: Inquiry, Argument and the Science of Order*, will be available at the University bookstore. The textbook selected for this course is unique in its approach (an approach designed, in fact, for the UO philosophy major). Be sure to consult the *errata sheet* for the textbook, available in the “Course Materials” folder of the course Blackboard website. Additional course materials will be posted on the course Blackboard website.

Course requirements:

1.) Discussion sections attendance is required. Students must attend 8 of 10 sections in order to receive a grade better than a C-.

2.) Weekly problem sets. These will be distributed and discussed in section each week. Problem sets are due at the beginning of class each WEDNESDAY and answers will be reviewed in class. Late assignments will not be accepted. Graded problem sets will be returned at section on the following Thursday. There will be seven problem sets.

3.) Two exams. The exams will include problems of the sort given on the weekly assignments and short-answer questions. The final exam will be cumulative. The first exam will be held on Monday, February 9, and will last 50 minutes. Two hours will be available for the final exam on Tuesday, March 15 beginning at 10:15 am.

4.) Final paper. The final paper will be on an assigned topic and will require that you reflect on the several general issues in the philosophy of logic based on class readings and discussion. The final paper must be submitted electronically through Blackboard by 10:15 on March 15 AND on paper at the beginning of the final exam period. Late papers will not be accepted.

5.) Participation 10% (note: this is participation in discussion, office hours and email, not attendance); problem sets 35% (7 @ 5% each); midterm exam 15%; final exam 25%; final paper 15%.

6.) While collaborative study and review of course material is encouraged, all work submitted must be your own. For information on what constitutes academic dishonesty, please consult The Plagiarism Guide for Students: [http://libweb.uoregon.edu/guides/plagiarism/students/](http://libweb.uoregon.edu/guides/plagiarism/students/).
**Academic Misconduct Policy:** All students are subject to the regulations stipulated in the UO Student Conduct Code ([http://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx](http://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx)). This code represents a compilation of important regulations, policies, and procedures pertaining to student life. It is intended to inform students of their rights and responsibilities during their association with this institution, and to provide general guidance for enforcing those regulations and policies essential to the educational and research missions of the University.

**Department of Philosophy Grading Standard:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>excellent. No mistakes, well-written, and distinctive in some way or other.</td>
<td>94-100</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>90-93.9</td>
</tr>
<tr>
<td>B+</td>
<td>good. No significant mistakes, well-written, but not distinctive in any way.</td>
<td>87-89.9</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>83-86.9</td>
</tr>
<tr>
<td>B-</td>
<td></td>
<td>80-82.9</td>
</tr>
<tr>
<td>C+</td>
<td>Some errors, but basic grasp of the material.</td>
<td>77-79.9</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>73-76.9</td>
</tr>
<tr>
<td>C-</td>
<td></td>
<td>70-72.9</td>
</tr>
<tr>
<td>D</td>
<td>poor. Several errors. A tenuous grasp of the material.</td>
<td>60-69.9</td>
</tr>
<tr>
<td>F</td>
<td>failing. Problematic on all fronts indicating either no real grasp of the material or complete lack of effort.</td>
<td>Below 60</td>
</tr>
</tbody>
</table>

**Scale:**

- **A**: 94-100
- **A-**: 90-93.9
- **B+**: 87-89.9
- **B**: 83-86.9
- **B-**: 80-82.9
- **C+**: 77-79.9
- **C**: 73-76.9
- **C-**: 70-72.9
- **D**: 60-69.9
- **F**: Below 60

**P/NP Grading:** A grade of ‘P’ requires a percentage score of 70% or higher.

**Incomplete Grades:** Incompletes must be arranged for in advance in accordance with University policy: [http://registrar.uoregon.edu/incomplete_policy](http://registrar.uoregon.edu/incomplete_policy).

**Accommodation for a Disability:** If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon.
PHIL 325—Logic, Inquiry and Argumentation
Readings, Topics, and Assignments

Week 1 Monday (1/5): Introductions, course overview, truth and action.
Wednesday: Reading, Logic, Chapter One: The Significance of Logic.
Lecture. Philosophical Problems and Logic.
Friday: Lecture. Summarizing Arguments.
Section: Problem Set 1 on the structure of arguments.

Week 2 Monday (1/12): Reading, Logic, Chapter Two: What is Logic?
Friday: Lecture. Argument as Inquiry.
Section: Problem Set 2 on the Pattern of Inquiry.

Week 3 Monday (1/19): MLK Holiday
Wednesday: Reading, Logic, Chapter Three: Communicative Action
Lecture. Problem Set Review & Fallacies
Friday: Lecture. Strategic and Communicative Action, Lifeworlds, and The Concept of Validity.
Section: Problem Set 3 on Communicative Action and Fallacies.

Week 4 Monday (1/26): Reading, Logic, Chapter Four: Theory of the Syllogism.
Wednesday: Lecture. Nominalism, Realism, and Theory of the Syllogism
Friday: Lecture. Determining Validity (Venn Diagrams).
Section: Problem Set 4 on syllogisms.

Week 5 Monday (2/2): Reading. Logic, Chapter Five: Induction and the Limits of Reason, Sections 5.1-5.2.
Wednesday: Lecture. Limits of the Syllogism
Friday: Lecture. Principles of Induction
Section: Review for exam.

Week 6 Monday (2/9): Exam.
Wednesday: Reading, Logic, Chapter Six: Principles of Order and Deduction, 6.1-6.5.
Lecture: Order and Agency.
Friday: Lecture. Modes of Action & Principles of Order.
Section: Workshop on symbolizing arguments and simple proofs.

Week 7 Monday (2/16): Reading, Logic, Chapter Six: Principles of Order and Deduction, 6.6-6.7.
Wednesday: Lecture. Propositional Logic.
Friday: Lecture. Truth Functional Rules and Deductions.
Section: Problem Set 5 on Propositional Logic.

Wednesday: Reading: Chapter Seven: An Overview of Quantified Logic, Part 7.1-7.7
Lecture. Problem Set Review & The Meaning of Quantifiers
Friday: Lecture. Quantified Deductions
Section: Problem Set 6 on Propositional Logic.
Week 9 Monday (3/2):
Reading: Chapter Seven: An Overview of Quantified Logic, Part 7.8-7.9
Lecture. Graphical Proofs

Wednesday: Lecture. Problem Set Review.

Friday: Lecture/Workshop: Graphical and Deductive Proofs.

Section: Problem Set 7 on Quantified Logic.

Week 10 Monday (3/9):
Reading: Chapter Seven: An Overview of Quantified Logic Lecture, Part 7.10
Lecture. Logic and Agency

Wednesday: Lecture. Problem Set Review.

Friday: Workshop. Sample Propositional and Quantified Logic Problems

Section: Discussion of final papers and review for final.

Finals Week

Monday, March 15: Final Exam, 10:15. Final paper due.