Logic, Reasoning, and Persuasion

730:101:05, Fall 2014

| Instructor: | Erik Hoversten |
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| Email: | ehoversten@philosophy.rutgers.edu |
| Office: | 106 Somerset St, Room 534, CAC |
| Office Hrs: | Wed and Thurs 2:00p-3:30p, and by appt. |
| Meeting Place: | Frelinghuysen Hall, Room B6, CAC |
| Meeting Times: | MW 4:30p-5:50p |
| Textbook: | A Concise Introduction to Logic, 12th edition, by Patrick Hurley Lecture notes and additional readings available on the course website |
| Course website: | Sakai: LRP 05 F14 |

Course overview

In this class we will introduce a variety of concepts and tools of **critical thinking**. The primary tool of philosophical study is the **argument**. We'll be examining argumentation from a variety of different perspectives. We'll begin by introducing the concepts of **reason** and **reasoning**. Once we have the basics down, we'll move on to **informal analysis** of arguments with an emphasis on understanding and diagnosing **informal fallacies** of reasoning. The bulk of the term will be spent on formal argumentation. We'll explore **deductive**, **inductive**, and **abductive** arguments in depth.

Core Curriculum Learning Goal: This course meets goal 'o': 'Examine critically philosophical and other theoretical issues concerning the nature of reality, human experience, knowledge, value, and/or cultural production.' Assessment will be by an SAS generic rubric embedded in the evaluation criteria laid out in this syllabus.

Assessment

Student grades will be determined based on performance on two in class exams, six homework assignments, and attendance and participation in class discussion.

Details regarding the assessment criteria are available on the course website. Late assignments will be accepted only if the instructor is given notice **prior** to the due date.

| Assignment | Due date and time | Point value |
|--------------|-------------------|----------------------|
| Midterm exam | 10/20 in class | 100pts |
| Final exam | 12/168a-11a | 100 pts |
| Homework | Various | 6 @ 20 pts = 120 pts |

Attendance

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University's Absence Reporting Website to indicate the date and reason for your absence. An email is automatically sent to me.

While attendance and participation are not formally used in calculating the final grade, the content of the exams will draw heavily on the lecture material. In addition, one of the best ways to develop an understanding of the material is to actively engage in class discussion.

Academic integrity

You must abide by the University's Academic Integrity Policy. The basic guideline is that credit should be given where credit is due. If you have any uncertainty regarding an issue of academic integrity please contact me about it.

Course schedule

The following is a tentative schedule for the course; adjustments will likely take place as the semester progresses.

| [H - Hurley] | LN = Lecture not | os (Sakai) AR - | Additional reading | (Sakai)] |
|---------------------------|----------------------------|------------------|--------------------|----------|
| $[\Pi = \Pi \Pi \Pi Hey,$ | $_{\rm LN} = $ Lecture not | es (Sakai), An - | Additional reading | (Sakai)] |

| | W 09/03 | Syllabus | |
|---------------------|---------|---------------------------------|---------------------------|
| Reasons & reasoning | M 09/08 | Varieties of reasons | H: §§1.1-1.2, LN: reasons |
| | W 09/10 | Arguments | H: §§1.3-1.4 |
| | M 09/15 | Language & translations | H: §§2.1-2.2 |
| Informal analysis | W 09/17 | Mood & content | HW1 due |
| informat analysis | M 09/22 | Informal fallacies 1 | H: §§3.1-3.3 |
| | W 09/24 | Informal fallacies 2 | §§3.4-3.5 |
| | M 09/29 | Buffer session | |
| | W 10/01 | Categorical propositions | H: §§4.1-4.2, HW2 due |
| | M 10/06 | Venn diagrams and syllogisms | H: Ch. 5 |
| | W 10/08 | Truth functions and connectives | H: §§6.1-6.3 |
| | M 10/13 | Rules of inference 1 | H: Ch. 7 |
| Deduction | W 10/15 | Review session | HW3 due |
| | M 10/20 | | Midterm exam (in class) |
| | W 10/22 | Rules of inference 2 | H: Ch. 7 |
| | M 10/27 | Buffer session | |
| | W 10/29 | Ampliative reasoning | HW4 due |
| | M 11/03 | Analogy | H: Ch. 9 |
| Induction | W 11/05 | Probability | H: Ch. 11 |
| maaction | M 11/10 | Statistical reasoning | H: Ch. 12 |
| | W 11/12 | Decision theory | HW5 due |
| | M 11/17 | Applications | |
| | W 11/19 | Buffer session | |
| | M 11/24 | Scientific reasoning | H: Ch. 13 |
| Abduction | W 11/26 | | No class |
| | M 12/01 | The problem of induction | HW6 due |
| | W 12/03 | Science and pseudoscience | H: Ch. 14 |
| | M 12/08 | Applications | |
| | W 12/10 | Review session | |
| | T 12/16 | | Final exam (8a-11a) |

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