## GEC Rationale For

## Philosophy 151: Introduction to Logic and Legal Reasoning

GEC Category: 1. Skills B. Quantitative and Logical Skills

- 1. <u>Basic computational Skills:</u> Students demonstrate computational skills and familiarity with algebra and geometry, and apply these skills to practical problems.
- 2. <u>Mathematical and Logical Analysis:</u> Students comprehend mathematical concepts and methods adequate to construct valid arguments, understand inductive and deductive reasoning, and increase their general problem solving skills.
  - The intent of this category is to focus on argument in a context that emphasizes natural language, mathematics, computer science, or quantitative applications not primarily involving data. In addition to mathematics and computer science courses, courses which emphasize the nature of correct argumentation either in natural languages or in symbolic form are appropriate. Courses should emphasize the logical processes involved in mathematics, inductive or deductive reasoning, or computing, as well as the theory of algorithms. Courses in logic and argumentation are also appropriate. B.S. students satisfy this requirement by completing Math 151 and 152 or the equivalent.
- 3. <u>Data Analysis:</u> Students understand basic concepts of statistics and probability, comprehend methods needed to analyze and critically evaluate statistical arguments, and recognize the importance of statistical ideas.

Philosophy 150 already satisfies this GEC, and Philosophy 151 will be teaching the same fundamental content, only with a strong thematic emphasis on legal reasoning. What follows is thus somewhat more cursory than it would be otherwise.

- (a) How do the course goals address the general and specific expected learning outcomes above?
  - Philosophy 151 aims to teach deductive and inductive reasoning in natural language (and with occasional excursions into elementary formal techniques)
  - Philosophy 151 also pays close attention to the construction of valid arguments, in legal contexts

- (b) How do the assigned readings address the general and specific expected learning outcomes above? (Bibliographic information is sometimes not enough for faculty outside the discipline to determine the content and relevance of texts to a specific course.)
  - the course textbook is specifically designed to teach students to improve their skills in deductive and inductive reasoning and valid argumentation in the context of legal arguments; it is a skills-oriented text
- (c) How do course topics address the general and specific expected learning outcomes above?
  - topics of the course include deductive reasoning (sentential logic, categorical logic) and inductive reasoning (fallacies, analogical reasoning, causal and scientific reasoning, statistical reasoning)
  - the means by which these topics are addressed is generally the analysis of arguments for validity, and the development of valid arguments for and against various positions
- (d) How do the written assignments address the general and specific expected learning outcomes above? Specifically, explain: how students gain significant writing experience and other related skills involving effective written and oral communication; how the course includes opportunities for feedback and revision; how students are encouraged to develop information literacy.
  - quizzes and exams aim to assess whether or not students can recognize good deductive and inductive arguments, and whether they can produce such arguments
  - participation grade encourages students to gain skills in oral communication of thoughts about deductive and inductive arguments and argument validity
  - development of information literacy encouraged indirectly, through making students more aware of how to extract valuable information from the information sources they access already (sorting better arguments from worse)
- (e) How will students sharpen communication skills through the preparation of essay exams and papers and through participation in discussions in this course?
  - essay exams and papers are not a component of the course
  - discussion will sharpen communication skills by requiring students to clearly articulate the specific virtues and flaws of various arguments of a legal bent