

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

LSC Use Only
Number _____
Action _____
Date _____

UWUCC Use Only
Number _____
Action _____
Date _____

I. TITLE/AUTHOR OF CHANGE

COURSE/PROGRAM TITLE PH 101 General Logic: Methods of Critical Thinking
DEPARTMENT Philosophy & Religious Studies
CONTACT PERSON Dr. Carol Caraway

II. THIS COURSE IS BEING PROPOSED FOR:

- _____ Course Approval Only
_____ Course Approval and Liberal Studies Approval
X Liberal Studies Approval only (course previously has been approved by the University Senate)

III. APPROVALS

Department Curriculum Committee

College Curriculum Committee

Director of Liberal Studies
(where applicable)

Sharon Montgomery
Department Chairperson
M. Stasch
College Dean

Provost
(where applicable)

*College Dean must consult with Provost before approving curriculum changes. Approval by College Dean indicates that the proposed change is consistent with long range planning documents, that all requests for resources made as part of the proposal can be met, and that the proposal has the support of the university administration.

IV. TIMETABLE

Date Submitted
to LSC _____
to UWUCC _____

Semester/Year to be
implemented _____

Date to be published
in Catalog _____

Revised 5/88

[Attach remaining parts of
proposal to this form.]

GENERIC SYLLABUS

I. CATALOG DESCRIPTION

PHILOSOPHY 101 GENERAL LOGIC: METHODS OF CRITICAL THINKING 3 credits
Prerequisites: None

Designed to develop students' ability to critically analyze deductive and inductive argumentation, rhetoric, and persuasion by examples drawn from media, textbooks, advertising, scholarly works, personal contacts, etc.

II. COURSE OBJECTIVES

1. Students will learn to recognize, analyze, and evaluate arguments:
 - a. to distinguish arguments from unsupported opinions,
 - b. to identify conclusions and premises,
 - b. to evaluate arguments as to validity and soundness.
2. Students will develop the skills of abstract logical thinking, critical analysis, decision making, and other aspects of the critical process by studying and applying fundamental principles of critical reasoning.
3. Students will apply the techniques of critical reasoning to actual arguments from philosophy and elsewhere and to current issues, ideas, institutions, and events.
4. Students will become acquainted with some of the major areas of philosophy through the analysis of arguments from those areas.

III. COURSE OUTLINE: varies with instructor and includes at least some of the following:

- A. Analyzing Deductive and Inductive Arguments: Premises & Conclusion, Charitable Interpretation / Philosophical Applications
- B. Evaluating Deductive Arguments: Validity & Soundness / Philosophical Applications
- C. Infernal Fallacies / Applications: Sexual and Racial Equality
- D. Evaluating Inductive Arguments: Generalization, Causal Arguments, Arguments from Analogy / Philosophical Applications

III. EVALUATION METHODS: varies with instructor and includes at least some of the following:

- A. Examinations
- B. Papers
- C. Final Examination

IV. REQUIRED TEXTS: : varies with instructor and includes the following:

1. Critical thinking text: Some possibilities are:
 - Jerry Cederblom & David W. Paulsen. *Critical Reasoning*, 2nd ed. Wadsworth, 1986.
 - Howard Kahane. *Logic and Contemporary Rhetoric [The Use of Reason in Everyday Life]*, 4th ed. Wadsworth, 1984.
 - C. A. Missimer. *Good Arguments [An Introduction to Critical Thinking]*. Prentice-Hall, 1986.
 - Merrilee H. Salmon. *Introduction to Logic and Critical Thinking*. Harcourt, Brace, Jovanovich, 1984.
 - Bruce N. Waller. *Critical Thinking [Consider the Verdict]*. Prentice Hall, 1988.
 - Perry Weddle. *Argument [A Guide to Critical Thinking]*. McGraw-Hill, 1978.

2. Arguments taken from selected readings in philosophy:
Sample below.

- PHILOSOPHY OF RELIGION

- Proofs for God's existence
 - Anselm & Descartes, ontological argument
 - Aquinas, cosmological arguments
 - Paley, teleological argument
 - Hume, teleological argument
- Problem of Evil
 - Hick, solution
 - defense of atheism (Nagel or Mackie)
- Adequate Evidence: Should we believe in God without it?
 - Pascal, wager
 - James, Will to Believe
 - criticism of James & Pascal (Clifford or Stich)

- VALUES: Sexual and Racial Equality
 - Richard Wasserstrom, "Racism and Sexism"
 - Allison Jagger, "Political Philosophies of Women's Liberation"

- EPISTEMOLOGY: Skeptical Arguments
 - Descartes, Meditation I
 - Ayer, "Argument from Illusion"

- METAPHYSICS: The Mind-Body Problem and the Problem of Personal Identity
 - Descartes, Meditation II
 - Hume, "the Self"
 - Perry, "Dialogue on Personal Identity & Immortality"

SAMPLE SYLLABUS

I. CATALOG DESCRIPTION

PHILOSOPHY 101 GENERAL LOGIC: METHODS OF CRITICAL THINKING 3 credits
Prerequisites: None

Designed to develop students ability to critically analyze deductive and inductive argumentation, rhetoric, and persuasion by examples drawn from media, textbooks, advertising, scholarly works, personal contacts, etc. Emphasis upon the nature of definition, clarification of meaning, detection of fallacies, scientific methodology, and logic as a practical tool.

II. COURSE OBJECTIVES

1. Students will learn to recognize, analyze, and evaluate arguments:
 - a. to distinguish arguments from unsupported opinions,
 - b. to identify conclusions and premises,
 - b. to evaluate arguments as to validity and soundness.
2. Students will develop the skills of abstract logical thinking, critical analysis, decision making, and other aspects of the critical process by studying and applying fundamental principles of critical reasoning.
3. Students will apply the techniques of critical reasoning to actual arguments from philosophy and elsewhere and to current issues, ideas, institutions, and events.
4. Students will become acquainted with some of the major areas of philosophy through the analysis of arguments from those areas.

III. COURSE OUTLINE

A. Analyzing Arguments

1. The Values (and Dangers) of Critical Reasoning
2. The Anatomy of Arguments: Identifying Premises & Conclusions.
3. Charitable Interpretation & Argument Patterns.
4. Applications to Writing.
5. Reconstruction: Adding Implicit Premises & Conclusions.
7. Using Techniques of Reconstruction in Writing.

B. Evaluating Arguments: Validity & Soundness

1. Evaluating Arguments: Does the Conclusion Follow from the Premises?
2. Techniques for Determining Validity: Euler Diagrams & Venn Diagrams.
3. An Argument can be Valid without the Premises being True: Refutation by Logical Analogy.
4. Applications: Proofs for God's existence
 - a. Descartes, ontological argument
 - b. Aquinas, cosmological arguments
5. Writing Critical Comments.

C. Evaluating Arguments: Informal Fallacies

1. Clarification of Meaning & Evaluation of Arguments.
2. Why are Bad Arguments sometimes Convincing? False Dilemma, Slippery Slope, Straw Man.
3. Affirming the Consequent, Denying the Antecedent, Equivocation, Begging the Question.
4. Appeal to Force, Appeal to Pity, Prejudicial Language.
5. Double Trouble: Appeal to Authority, Attacking the Person.

- 6. Applications: Sexual and Racial Equality
 - a. Richard Wasserstrom, "Racism and Sexism"
 - b. Allison Jagger, "Political Philosophies of Women's Liberation"

D. *Evaluating Inductive Arguments*

- 1. Empirical Generalization.
- 2. Causal Generalization, the Controlled Experiment & the Faulty Move from Correlation to Cause.
- 3. Arguments from Analogy.
- 4. Applications: Proofs for God's existence
 - a. Paley, teleological argument
 - b. Hume, teleological argument

III. *EVALUATION METHODS:* The semester grade will be calculated by totaling points earned and then dividing by the total points possible:

A. *Required Examinations:*

1. EXAMINATION 1: Chapters 1, 2, & 3.	200 points
2. EXAMINATION 2: MIDTERM: Chapters 1, 2, 3, & 4.	200 points
3. EXAMINATION 3: Chapters 5 & 5.	200 points
4. EXAMINATION 4: Chapter 9.	200 points
Total points on required examinations	800 points

B. *Optional Comprehensive Final Examination* 300 points

C. *Class Attendance and Participation:* strongly encouraged. Will be considered in determining borderline semester grades.

IV. *TEXTS:*

A. *required:*

- 1. *Critical Reasoning.* Second Edition. Jerry Cederblom & David W. Paulsen. Wadsworth Publishing Company, 1984.
- 2. Selected Readings [either an anthology or a collection of readings compiled by the instructor and produced by Kinko's].

B. *recommended:* Strunk & White, *The Elements of Style*

LIBERAL STUDIES COURSE APPROVAL FORM

About this form: Use this form only if you wish to have a course included for Liberal Studies credit. The form is intended to assist you in developing your course to meet the university's Criteria for Liberal Studies, and to arrange your proposal in a standard order for consideration by the LSC and the UWUCC. If you have questions, contact the Liberal Studies Office, 353 Sutton Hall; telephone, 357-5715.

Do not use this form for technical, professional, or pre-professional courses or for remedial courses, none of which is eligible for Liberal Studies. **Do not** use this form for sections of the synthesis course or for writing-intensive sections; different forms will be available for those.

PART I. BASIC INFORMATION

A. For which category(ies) are you proposing the course? Check all that apply.

LEARNING SKILLS

- First English Composition Course
 Second English Composition Course
 Mathematics

KNOWLEDGE AREAS

- Humanities: History
 Humanities: Philosophy/Religious Studies
 Humanities: Literature
 Fine Arts
 Natural Sciences: Laboratory Course
 Natural Sciences: Non-laboratory Course
 Social Sciences
 Health and Wellness
 Non-Western Cultures
 Liberal Studies Elective

B. Are you requesting regular or provisional approval for this course?

Regular Provisional (limitations apply, see instructions)

C. During the transition from General Education to Liberal Studies, should this course be listed as an approved substitute for a current General Education course, thus allowing it to meet any remaining General Education needs? yes no

If so, which General Education course(s)? PH 101 General Logic: Methods of Critical Thinking

It is the same course modified somewhat to meet LS goals more fully.

PART II: WHICH LIBERAL STUDIES GOALS WILL YOUR COURSE MEET? Check all that apply and attach an explanation.

All Liberal Studies courses must contribute to at least one of these goals; most will meet more than one. As you check them off, please indicate whether you consider them to be primary or secondary goals of the course. [For example, a history course might assume "historical consciousness" and "acquiring a body-of knowledge" as its primary goals, but it might also enhance inquiry skills or literacy or library skills.] Keep in mind that no single course is expected to shoulder all by itself the responsibility for meeting these goals; our work is supported and enhanced by that of our colleagues teaching other courses.

	Primary	Secondary
A. Intellectual Skills and Modes of Thinking:		
1. Inquiry, abstract logical thinking, critical analysis, synthesis, decision making, and other aspects of the critical process.	x	_____
2. Literacy--writing, reading, speaking, listening	_____	x
3. Understanding numerical data	x	_____
4. Historical consciousness	_____	_____
5. Scientific inquiry	_____	x
6. Values (ethical mode of thinking or application of ethical perception)	_____	x
7. Aesthetic mode of thinking	_____	_____
B. Acquiring a Body of Knowledge or Understanding Essential to an Educated Person	_____	x
C. Understanding the Physical Nature of Human Beings	_____	_____
D. Certain Collateral Skills:		
1. Use of the library	_____	_____
2. Use of computing technology	_____	_____

PART III. DOES YOUR COURSE MEET THE GENERAL CRITERIA FOR LIBERAL STUDIES? Please attach answers to these questions.

(Explanations for all below attached.)

- A. If this is a multiple-section, multiple-instructor course, there should be a basic equivalency (though not necessarily uniformity) among the sections in such things as objectives, content, assignments, and evaluation. Note: this should not be interpreted to mean that all professors must make the same assignments or teach the same way; departments are encouraged to develop their courses to allow the flexibility which contributes to imaginative, committed teaching and capitalizes on the strengths of individual faculty.

What are the strategies that your department will use to assure that basic equivalency exists? Examples might be the establishment of departmental guidelines, assignment of responsibility to a coordinating committee, exchange and discussion of individual instructor syllabi, periodic meetings among instructors, etc.

- B. Liberal Studies courses must include the perspectives and contributions of ethnic and racial minorities and of women wherever appropriate to the subject matter. If your attached syllabus does not make explicit that the course meets this criterion, please append an explanation of how it will.

- C. Liberal Studies courses must require the reading and use by students of at least one, but preferably more, substantial works of fiction or nonfiction (as distinguished from textbooks, anthologies, workbooks, or manuals). Your attached syllabus must make explicit that the course meets this criterion.

[The only exception is for courses whose primary purpose is the development of higher level quantitative skills; such courses are encouraged to include such reading, but are not expected to do so at the expense of other course objectives. If you are exercising this exception, please justify here.]

- D. If this is an introductory course intended for a general student audience, it should be designed to reflect the reality that it may well be the only formal college instruction these students will have in that discipline, instead of being designed as the first course in a major sequence. That is, it should introduce the discipline to students rather than introduce students into the discipline. If this is such an introductory course, how is it different from what is provided for beginning majors?

Liberal Studies Form -- 4

E. The Liberal Studies Criteria indicate six ways in which all courses should contribute to students' abilities. To which of the six will your course contribute? Check all that apply and attach an explanation.

- 1. Confront the major ethical issues which pertain to the subject matter; realize that although "suspended judgment" is a necessity of intellectual inquiry, one cannot live forever in suspension; and make ethical choices and take responsibility for them.
- 2. Define and analyze problems, frame questions, evaluate available solutions, and make choices
- 3. Communicate knowledge and exchange ideas by various forms of expression, in most cases writing and speaking.
- 4. Recognize creativity and engage in creative thinking.
- 5. Continue learning even after the completion of their formal education.
- 6. Recognize relationships between what is being studied and current issues, thoughts, institutions, and/or events.

PART IV. DOES YOUR COURSE MEET THE CRITERIA FOR THE CURRICULUM CATEGORY IN WHICH IT IS TO BE LISTED?

Each curriculum category has its own set of specific criteria in addition to those generally applicable. The LSC provides copies of these criteria arranged in a convenient, check-list format which you can mark off appropriately and include with your proposal. The attached syllabus should indicate how your course meets each criterion you check. If it does not do so explicitly, please attach an explanation.

CHECK LIST -- HUMANITIES: PHILOSOPHY

F

Knowledge Area Criteria which the course must meet:

- Treat concepts, themes, and events in sufficient depth to enable students to appreciate the complexity, history, and current implications of what is being studied; and not be merely cursory coverages of lists of topics.
- Suggest the major intellectual questions/problems which interest practitioners of a discipline and explore critically the important theories and principles presented by the discipline.
- Allow students to understand and apply the methods of inquiry and vocabulary commonly used in the discipline.
- Encourage students to use and enhance, wherever possible, the composition and mathematics skills built in the Skill Areas of Liberal Studies.

Philosophy Criteria which the course must meet:

- Introduce students to some of the great philosophers of Western civilization, avoiding excessive emphasis on one author or period of philosophical development.
- Introduce students to some or all of the major areas of philosophy (aesthetics, epistemology, ethics, and metaphysics). *Logic (omitted by mistake)*
- Courses which choose to emphasize one or more of these areas must do so in such a way as to show students the relationships among the various areas of philosophy.
- Alternately, courses which choose to approach these areas of philosophy historically by examining one or more of the recognized historical periods in philosophy (e. g. ancient/medieval, modern, or contemporary) must do so in such a way as to show students the contrasts and similarities with other periods.
- Provide opportunities, through the close analysis and evaluation of fundamental issues, for student to gain both an understanding of philosophy and an enhanced ability to think critically and responsibly about important issues.
- Investigate relationships with non-Western traditions and cultures where appropriate.
- Give due attention to the philosophical work of women and minorities.
- Use primary sources when feasible and appropriate.

F

**LIBERAL STUDIES CHECKLIST FOR
PHILOSOPHY 101 GENERAL LOGIC: METHODS OF CRITICAL THINKING**

II. COURSE OBJECTIVES

A. INTELLECTUAL SKILLS & MODES OF THINKING:

1. Students will develop the skills of abstract logical thinking, critical analysis, decision making, and other aspects of the critical process by studying the fundamental principles of correct reasoning. They will learn to analyze arguments and to recognize valid and invalid patterns of inference. They will also learn to recognize various informal fallacies and to apply rules for determining the strength of various types of inductive arguments. Logic courses are the place to learn these principles. PRIMARY.

2. Learning to recognize, analyze, and evaluate arguments is an important part of literacy. Learning to evaluate actual arguments will enhance students' abilities to read carefully and analytically and to evaluate the strength of what they have read. Many students cannot write well because they do not understand the principles of logical reasoning and, therefore, cannot organize their thoughts. Studying those principles will enhance the students' ability to organize their thoughts and, thereby, their ability to write well. SECONDARY.

3. Since mathematics teaches logical principles in its courses and regards logic as part of mathematics, this course is helpful in understanding numerical data. Study of the logical foundations of mathematics will enhance students' understanding of both numerical data and computer science. PRIMARY.

4. Historical consciousness. NO.

5. Scientific reasoning involves deduction and induction, both of which are presented in the course. Thus, students will gain a rudimentary understanding of the nature of scientific inquiry by studying its logical foundations. They may also learn to evaluate the validity of various types of scientific experiments. SECONDARY.

6. Students will enhance their ability to make responsible decisions about fundamental issues of value through learning to use logic as a practical tool for decision making. They will confront ethical issues in examples and will learn to analyze and evaluate ethical positions, such as those on the morality of abortion or racism. They will, thereby, learn that ethical problems can be approached with insight and understanding rather than with dogmatism and prejudice. SECONDARY.

7. Aesthetic. NO.

B. ACQUIRING KNOWLEDGE OR UNDERSTANDING: The course enhances the students' understanding of human reasoning and knowledge of the extent to which human thought is or is not logical. An understanding of logic is especially important for those living in a computer-dominated culture. SECONDARY.

III. GENERAL CRITERIA

A. All instructors who have taught this course during the previous academic year and summer and all who intend to teach it the following academic year will meet at the conclusion of the spring semester. They will review this document, including the generic syllabus. They will exchange individual syllabi and then will discuss whether they are meeting the specific goals and criteria outlined in this document. Any problems or conflicts will be brought before the entire department for resolution.

B. The course will include the perspectives and contributions of ethnic and racial minorities and women wherever appropriate. This will be done on several levels. First, through the instructor's use of nonsexist, nonracist language. Second, through the instructor's criticism of sexist and racist language and stereotypes. Third, through the inclusion of readings or texts by women and minorities (where feasible and appropriate). Fourth, through references to and discussions of the perspectives and contributions of women and minorities. Fifth, through the discussion of examples dealing with issues such as sexism and racism.

C. Students may read excerpts from primary philosophical works. Since this is primarily a skills course, however, the emphasis will be on developing reasoning skills rather than on analyzing a long philosophical work. Some instructors may focus on short argument passages taken from philosophical works; others may analyze a "fairly large" major work. Students will not read an entire philosophical monograph if doing so would make it impossible to cover the principles of reasoning fundamental to the course.

D. Philosophy courses are not sequential as are courses in math or chemistry. There is no special course designed to introduce our majors into the discipline of philosophy. This course is equally suitable for majors and non-majors. It teaches logical reasoning over a wide range of philosophical and non-philosophical topics.

E. CONTRIBUTING TO STUDENTS' ABILITIES:

1. Students will enhance their ability to make responsible decisions about fundamental issues of value by developing their critical reasoning abilities. Logical skills apply to ethical problems. The course begins where the students are and teaches them the stance of the critical evaluator. The stance is one of informed commitment to truth; it does not leave them in skepticism.

2. Students will see how logicians define and analyze problems, frame questions, evaluate available solutions, and make choices. They will work on problems either in groups or individually.

3. Students will be required to communicate knowledge & exchange ideas through discussion. They will be expected to evaluate arguments to determine which conclusions are most reasonable. Mastery of the principles of logical reasoning contributes to clarity of expression in speaking and writing.

H

4. Logical reasoning is sometimes seen as opposed to creativity. It is not. "Creativity" involves criticism of the status quo or "accepted solution" and reaching out for possible solutions as yet untried. The study of philosophy will help both in the questioning of the all-too-obvious and in the imagining of new alternatives.

5 & 6. Students will be shown applications of fundamental logical principles to current issues, ideas, institutions, and events. The need to continue to develop and use critical reasoning to make crucial decisions throughout life will be emphasized. Reasoning skills should persist and continue to improve students' ability to learn, evaluate, decide, and act.

IV. KNOWLEDGE AREA CRITERIA:

A. The course will treat logical concepts, principles, and techniques in sufficient depth to enable students to appreciate the complexity, history, and current implications of logic.

B. The course will suggest major intellectual questions or problems which interest philosophers and explore important logical concepts and principles.

C. The course will require students to understand and apply the methods of logical reasoning and vocabulary commonly used in the discipline to examples from philosophy and elsewhere.

D. The effects on literacy are discussed above. Many students cannot write well because they cannot reason well. The course aims to remedy that defect. Should class size be sufficiently reduced, composition might be required. Because logic overlaps mathematics, the course will also enhance mathematics skills.

V. PHILOSOPHY CRITERIA:

A. Through the use of examples from philosophy and through its discussion of logicians, the course will introduce students to some of the great philosophers of Western civilization avoiding excessive emphasis on one author or period of philosophical development.

B. The course will emphasize logic and introduce students to other areas such as ethics through the analysis of arguments from those areas.

C. This has already been discussed.

D. Relationships to non-Western traditions and cultures will be investigated where appropriate, such as in arguments on ethical relativism and the nature of God.

E. This was discussed in III. B.

F. Primary sources will be used when feasible and appropriate. (See III.C.)