

Bergen Community College
Division of Arts & Humanities
Department of Philosophy & Religion

Course Syllabus

PHR-103 Basic Logic

Basic Information about Course and Instructor

Semester and year:
Course and Section Number:
Meeting Times and Locations:

Instructor:
Office Location:
Phone:
Departmental Secretary: [optional]
Office Hours:
Email Address:

Course Description

PHR-103 Basic Logic is an introduction to the basic principles and methods of correct reasoning. Topics of discussion include the relationship between logic and language; the distinction between formal and informal logic; the detection and avoidance of formal and informal fallacies; the formulation and evaluation of deductive arguments; the differences between traditional and modern (symbolic) logic; and the nature, scope, and limits of inductive reasoning.

3 lectures, 3 credits

General Education Course – Humanities Elective

Student Learning Goals: As a result of meeting the requirements in this course, students will be able to

1. identify and summarize the basic problems, principles, and methods of logical reasoning;
2. detect and avoid fallacious reasoning;
3. formulate and evaluate deductive arguments;
4. apply the principles and methods of logical reasoning to the analysis of texts, to the conduct of scientific inquiry, and to the problems of everyday life; and
5. use language, both in speaking and writing, with logical rigor and clarity.

In pursuit of the above objectives, the course is based on a standard introductory text on deductive and inductive logic; techniques of scholarly research and writing are reviewed; students are given the opportunity and are encouraged to participate actively in class discussions, and students are required to do a substantial amount of expository and critical writing in response to the material presented in the course.

The Student Learning Objectives (SLOs) in this course are intended to be aligned with as many of the college's Core Competencies and General Education Goals as possible. They are also correlated with the overall Learning Goals of the Philosophy Program. In addition, student progress in reaching the course's SLOs is to be assessed through a variety of assessment types (tools) and on the basis of a variety of assessment criteria. These alignments and correlations are depicted in the [attached document](#). [[Back to course listing](#)]

Special Features of the Course (if any) [to be designated by the instructor]

E.g., the use of learning technologies in the course (Internet, PowerPoint, etc.); the inclusion of technological literacy and/or information literacy learning in the course; etc.

Writing and Critical Thinking Requirement(s)

Because PHR-103 is a General Education course, it requires students to complete a variety of critical thinking and writing assignments. These assignments may include class discussions and debates requiring the application of critical thinking skills, short in-class essays, out-of-class writing projects (journals, research papers, argument-analysis papers, book reviews, etc.), tests and examinations containing essay components, and so forth. Instructors will respond to and comment on students' writing in detail. ([See also statement on grading policy, below.](#))

Course Content

PHR-103 is the first level course in a two semester sequence in logic. PHR-203 Intermediate Logic, the second level course, focuses, among other things, upon predicate logic. Consequently, it is important that all instructors teaching PHR-103 cover a complete system of sentential or propositional logic in Basic Logic. Further, since PHR-203 Intermediate Logic uses truth trees as the preferred method of establishing validity of symbolic arguments, instructors in the first level course are encouraged to introduce their students to truth trees. Those instructors teaching PHR-103 who choose not to teach truth trees are required to teach natural deduction in sentential logic as a means of establishing validity. Although the focus of PHR-103 is on formal deductive logic, instructors must include some discussion of other aspects of logic, such as a discussion of language and logic, informal fallacies, or inductive logic.

Grading Policy

Students' final grades for this course will be based primarily upon their performance on the required work for the course (examinations, quizzes, homework, writing assignments, journals, class presentations, etc.). Students' grades will not be based exclusively on 'objective' or 'short answer' quizzes or examinations. Major examinations must include some essay questions which require students to demonstrate understanding of certain techniques and concepts. Students' class participation may also be evaluated and the grade used as one factor in determining final averages; however, class participation may count for no more than fifteen percent (15%) of a student's final course grade.

Attendance Policy

BCC Attendance Policy:

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

Philosophy and Religion Departmental Attendance Policy:

Students are expected to attend class regularly and punctually. Attendance will be taken at each class session. It is expected that class will be conducted such that students will benefit in their written work by the lectures and class discussion. If students occasionally arrive late, they should be encouraged to enter quietly, not disturbing the class. If students miss class, they should be encouraged to use the course calendar to stay abreast of material. It is probably a good idea for students to find study partners and to exchange telephone numbers. Make-ups for examinations should be allowed by the instructor if, in the instructor's judgment, the student has presented a good excuse for missing the work. Instructors may penalize work which is late; however, the instructor's policies for make-ups and late work must be clearly specified on the student guide.

Attendance Policy in this Course:

[To be designated by the instructor]

Course Texts and/or Other Study Materials

Recommended Texts – the most recent editions of the following:

Stephen F. Barker, *The Elements of Logic* (McGraw-Hill)
Irving Copi and Carl Cohen, *Introduction to Logic* (Prentice-Hall).
Harry J. Gensler, *Introduction to Logic* (Routledge).
Patrick Hurley, *A Concise Introduction to Logic* (Wadsworth). Current departmentally-approved text for this course.

Robert M. Johnson, *Fundamentals of Reasoning – A Logic Book* (Wadsworth).
Howard Kahane and Paul Tidman, *Logic and Philosophy: A Modern Introduction* (Wadsworth).
David Kelley, *The Art of Reasoning* (Norton).
Brooke N. Moore and Richard Parker, *Critical Thinking* (McGraw-Hill).
John Nolt, *Logics* (Wadsworth)
Howard Pospesel, *Propositional Logic and Predicate Logic* (Prentice-Hall).
Merilee H. Salmon, *Introduction to Logic and Critical Thinking* (Wadsworth).

Other College, Divisional, and/or Departmental Policy Statements [optional but recommended]

<p><u>Examples:</u> Statement on plagiarism and/or academic dishonesty. ADA statement. Sexual Harassment statement. Statement on acceptable use of BCC technology. Statement on the purpose and value of faculty office hours.</p>
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Student and Faculty Support Services [optional but recommended]

List support services, e.g., the Writing Center, the Math Lab, the Tutorial Center, Online Writing Lab (OWL), Office of Specialized Services, etc. Include information on the BCC Library.

Example:

Student and Faculty Support Services

The Distance Learning Office – for any problems you may have accessing your online courses	Room C-334	201-612-5581 psimms@bergen.edu
Smarthinking Tutorial Service	On Line at:	www.bergen.edu/library/learning/tutor/smart/index.asp
The Tutoring Center	Room S-118	201-447-7908
The Technology Assisted Learning Lab (Math and English)	Room C-110	201-447-7988
The Writing Center	Room C-110	201-447-7136
The Online Writing Lab (OWL)		www.bergen.edu/owl
The Office of Specialized Services (for Students with Disabilities)	Room S-153	201-612-5270
The Sidney Silverman Library – Reference Desk	Room L-226	201-447-7436

Include the following statement on Logos – The BCC Philosophy Club

Logos – The BCC Philosophy Club

Logos usually meets on Tuesdays during the Activities Period, 12:30-1:25 PM, in Room L-342. I encourage you to join the club. Since you are interested in the study of philosophy, you should find the meetings and other activities of the philosophy club very interesting. For further information, check the Philosophy & Religion bulletin board adjacent to Room L-325A or contact LOGOS Advisor, Dr. Vanda Bozicevic (L-331, 201-493-7528, vbozicevic@bergen.edu). (LOGOS does not hold regular meetings during the summer.)

Include a Course Outline and Calendar [can be combined in a single syllabus section]

The Course Outline and Calendar must include all of the following elements:

- A daily or (at least) weekly schedule of topics to be covered.
- Dates for exams, quizzes, or other means of assessment. (This does not mean that all evaluation of students must be in groups and at the same time. Exams and other means of assessment can be listed as "to be scheduled individually.")
- Due dates for major assignments – e.g., when is a paper due; if the topic has to be approved, when; if an outline or draft is an interim step, when it is due.
- Any required special events must be included in the outline/calendar, e.g., a lecture by a visiting speaker, a dramatic or musical performance, a field trip.
- Designation of Student Learning Objectives – by number – for each topic (see sample below).
- A note to students stating that the course outline and calendar is tentative and subject to change, depending upon the progress of the class.

Sample Format for Combined Course Outline and Calendar

Note to Students: The following Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class.

Week(s)	Date(s)	Topic/Activity	Learning Objectives	Assignments/Events
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

SAMPLE COURSE OUTLINE AND CALENDAR
(see next page)

SAMPLE COURSE OUTLINE AND CALENDAR

[with designation of Student Learning Objectives – by number – for each topic]

Note to Students: The following Course Outline and Calendar is tentative and subject to change, depending upon the progress of the class.

Part I. Logic — The Process of Correct Reasoning

Week(s)	Date(s)	Topic/Activity/Assignments	Student Learning Objectives
1	Sep 5	Introduction to the Course	
2	Sep 12	The Process of Argument Analysis and Evaluation Course Text, 1-11; Exercises 1.1-1.7	1, 2, 3, 5
3	Sep 19	Deductive and Nondeductive Logic Course Text, 11-19; Exercise 1.8 First Paper Assigned (due 10/10)	1, 3 1-5
4	Sep 26	Necessary and Contingent Statements Course Text, 20-25; Exercise 1.9 Review of the Process of Argument Analysis and Evaluation Course Text, 25-29; Exercise 1.10	1, 4 1-3
5	Oct 3	<u>Exam 1</u> (Chapter 1) Notebook Check	1-5

Part II. Introduction to Propositional Logic

Week(s)	Date(s)	Topic/Activity/Assignments	Student Learning Objectives
6	Oct 10	Statements and Statement Forms Course Text, 31-39; Exercises 2.1-2.5 First Paper Due Return and Review of Exam 1	1 1-5
7	Oct 17	The Logical Operators and Basic Rules of Propositional Logic Course Text, 39-45; Exercise 2.6 Return and Review of First Paper Second Paper Assigned (due 11/14)	1 1-5 1-5
8	Oct 24	Argument Forms and Truth Tables Course Text, 45-55; Exercises 2.7-2.10	1-3
9	Oct 31	Truth Trees Course Text, 55-61; Exercises 2.11-2.14	1-3
10	Nov 7	<u>Exam 2</u> (Chapter 2) Notebook Check	1-5

Part III. More Advanced Features of Propositional Logic

Week(s)	Date(s)	Topic/Activity/Assignments	Student Learning Objectives
11	Nov 14	Truth functions Course Text, 63 Tautologies, Contradictions, and Contingent Statements Course Text, 63-67; Exercises 3.1-3.2 Logical and Material Conditionals and Biconditionals Course Text, 67-69; Exercise 3.3 Second Paper Due Return and Review of Exam 2	1 1 1 1-5
12	Nov 21	Arguments as Conditional Statements Course Text, 70-72; Exercise 3.4 Necessary and Sufficient Conditions Course Text, 72-73 Eccentrically Valid Arguments Course Text, 74-75 Return and Review of Second Paper	1-4 1, 4 1, 3 1-5
13	Dec 5	Consistency and Validity Course Text, 75-81; Exercises 3.5-3.8 Final Deadline for Late Papers and Extra Credit Work	1-4
14	Dec 12	Further Uses of Truth Trees Course Text, 82-85; Exercises 3.9-3.12	1-3
15	Dec 19	<u>Exam 3</u> (Ch. 3) Notebook Check	1-5