

Course Syllabus: PHIL 21002 Introduction to Formal Logic

Spring 2025, Section 001

Instructor: Prof. Michael Byron Kent State University Department of Philosophy 320 Bowman Hall	Office Phone: 330/672-2315 Email: mbyron@kent.edu Virtual Office Hours: TR 10:30am-12pm
--	---

Delivery: 100% Web-Based, Asynchronous
Dates: 01/13/2025 – 05/11/2025

Course Information

Course Description

This course is designed to sharpen students' reasoning skills and to help them better understand the structure of reasoning in general. To do this, it introduces students to some formal languages, such as Propositional Logic and Predicate Logic, that represent the logical structure of deductive reasoning. Unlike natural languages such as English, these formal languages allow us to focus on the general structure of different types of arguments, without discussing the content of any particular argument. This course covers both the construction of formal proofs in these languages, and translation between them and English. The study of formal logic contributes to effective and persuasive reasoning, not only in philosophy, but in any discipline or context. It also provides effective tools for evaluating the strength of English-language arguments. The skills that students acquire in this course are thus widely applicable in their personal, professional, and academic lives.

University Requirements:

This course may be used to satisfy a Kent Core requirement. The Kent Core as a whole is intended to broaden intellectual perspectives, foster ethical and humanitarian values, and prepare students for responsible citizenship and productive careers.

Course Times and Location

This is a fully online, 16-week course. There will be no face-to-face meetings. All assignments have due dates; please refer to the course schedule located within the course.

Prerequisites

MATH 00022 with a minimum C grade or minimum 22 ACT mathematics score or minimum 520 SAT mathematics score or minimum 35 ALEKS placement exam score.

Course Learning Outcomes

By the end of the course, you will be able to:

1. Develop an understanding of the nature of deductive reasoning.
2. Develop a fluency in the formal languages of propositional logic and predicate logic.
3. Learn techniques of proof construction.
4. Learn techniques for determining whether or not an argument is deductively valid.

Learning Materials

WebAssign:

You paid for WebAssign via FlashBooks. The links to readings, assignments, and assessments in Canvas should function correctly.

Disclaimer: The instructor is not financially affiliated with Cengage/WebAssign and receives no monetary benefit from requiring this material.

Technology Requirements and Skills

Computer Hardware and Software

A personal computer with consistent, reliable Internet access is required, and must meet the following requirements:

1. A broadband connection to the Internet.
2. Laptop or desktop computer with a minimum of a 2 GHz processor and 8 GB of RAM

You should have one of the following computer operating systems and additional software applications installed on your computer:

1. A fully updated version of a current operating system (OS), such as Windows 11 or MacOS 12 or later.
2. For antivirus for Windows and Mac make sure to keep your system update with the latest patches.
3. Adobe [Acrobat Reader](#).

Additional information for Technology Requirements can be found on the [Technology Information](#) web page.

Technology Skills

Additional information about technology can be found on the [Tips for Online Students](#) page.

Canvas

This class will use Canvas, the official learning management system (LMS) used by Kent State University to deliver course materials to university students. ALL course materials and activities will take place in Canvas.

In order to login to the online Canvas LMS, students will need a Kent State FlashLine User Name ID and password.

Technology Help Guidelines

- A. 30-Minute Rule: When you encounter struggles with technology, give yourself 30 minutes to 'figure it out.' If you cannot, then post a message to the discussion board; your peers may have suggestions to assist you. You are also directed to contact the KSU Helpdesk 24/7. As a last resort, contact me. However, do not expect an immediate reply, and I cannot guarantee that I will be able to help with any and all technology issues.
- B. When posting or sending email requesting help with technology issues, whether to the Helpdesk or me, use the following guidelines:
 1. Include a descriptive title for the subject field that includes 1) the name of course 2) the issue. Do NOT just simply type "Help" into the subject field or leave it blank.

2. List the steps or describe the circumstance that preceded the technical issue or error. Include the exact wording of the error message.
 3. When possible, always include a screenshot(s) demonstrating the technical issue or error message.
 4. Also include what you have already tried to do to remedy the issue (rebooting, trying a different browser, etc.).
- C. **Three Levels of Support:** The course includes 3 levels of support for you, depending on your issue.
1. Issues with Canvas, MS Teams, or any other KSU site or software: please visit the [Information Technology](#) web page or call 330-672-HELP 24/7.
 2. Technical issues with WebAssign: please contact Cengage support, which has a link at the top of every page on the site (and an 800 number).
 3. Logic issues, including homework assignments, reading: please contact the instructor (mbyron@kent.edu).

Policies and Expectations

Online Attendance Policy

Online courses are conducted on the premise that regular attendance requires students to log into the Canvas learning management system (LMS). Attendance is measured both by virtual presence in the online course and student interaction with course learning materials and assignments. Students are expected to check their Kent State e-mail and to log into the system multiple times (at least every other day) during the week.

All actions by students in the Canvas LMS can be tracked. At any time during the course, an instructor may generate a report that indicates when and how long individual students have been logged into the LMS or engaged with course materials or course tools.

Students who anticipate an absence from the online course due to technical or medical reasons should consult with the instructor individually. An absence due to illness or injury requires verification from a medical professional and should be presented to the instructor.

Communication Policy

1. Email course questions and personal concerns, including grading questions, to us privately using your @kent.edu email. Do NOT submit posts of a personal nature to the discussion board.
2. Email will be checked at least once per day Monday through Friday, and at least once during the weekend. I will respond to all emails within 24 hours during the week, and within 48 hours during the weekend. If there are special circumstances that will delay my response, I will make an announcement to the class.
3. The Q&A discussion board will be checked twice per day Monday through Friday; Saturday and Sunday, the discussion board will be checked once per day.
4. Virtual office hours will be held using the MS Teams. **I will hold Virtual Office Hours TR 10:30am–12:00noon, as well as special office hours for dedicated topics, such as a large, upcoming assignment.** Special topic hours will be

announced in advance through the Announcement tool. We are also happy to schedule one-on-one office hours in person or via phone.

5. For questions related to technology, please contact: 330-672-HELP for 24/7 support.

Online Student Conduct and (N)etiquette

Communicating appropriately in the online classroom can be challenging. In order to minimize this challenge, it is important to remember several points of “internet etiquette” that will smooth communication for both students and instructors:

1. **Read first, Write later.** Read the *entire* set of posts/ comments on a discussion board before posting your reply, in order to prevent repeating commentary or asking questions that have already been answered.
2. **Avoid language that may come across as strong or offensive.** Language can be easily misinterpreted in written electronic communication. Therefore, please review email and discussion board posts before submitting to assess the tone. For example, humor and sarcasm may be easily misinterpreted, so they may be best to avoid. Also, do not write using all capital letters because it can be interpreted as yelling. Lastly, you may want to consider using emoticons when appropriate, which can be helpful in conveying nonverbal feelings. ☺
3. **Consider the privacy of others.** Ask permission prior to giving out a classmate's email address or other information. You are not to share anything from this class with others who are not in this class, including peer work, class discussions, or course materials. Similarly, do not communicate anything within this class that is confidential or private.
4. **Keep attachments small.** If it is necessary to send pictures, change the size to an acceptable size of 250kb or less (there are several programs you can use to do this such as: Photoshop, Paint, GIMP, and picresize.com).
5. **No inappropriate material.** Do not forward virus warnings, chain letters, jokes, etc. to classmates or instructors. The sharing of pornographic material is strictly forbidden.

NOTE: *The instructor reserves the right to remove posts that are not collegial in nature and/or do not meet the Online Student Conduct and Etiquette guidelines listed above.*

University Use of Electronic Email

A university-assigned student e-mail account is the official university means of communication with all students at Kent State University. Students are responsible for all information sent to them via their university-assigned e-mail account. If a student chooses to forward information in their university e-mail account, he or she is responsible for all information, including attachments, sent to any other e-mail account. To stay current with university information, students are expected to check their official university e-mail account and other electronic communications on a frequent and consistent basis. Recognizing that some communications may be time-critical, the university recommends that electronic communications be checked minimally twice a week.

Assignments and Grades

A detailed breakdown of course assignments and due dates by lesson module is available as a separate pdf document that can be accessed in Canvas by clicking on the **Syllabus and Schedule** link in the course menu.

Homework (WebAssign)

- All assignments are found on the WebAssign website.
- Most WebAssign assignments are graded. Some, such as optional practice exercises, are not. Optional practice exercises are clearly marked as such.
- You will receive feedback about every answer you submit and an explanation of the question.
- You also have the option to save your work and come back later to finish the question and check your answer; if you choose this option and do not return, the work you had completed will be graded at the due date. **After the due date passes, you will be unable to change your answers or submit any new work.** The software does not care whether you have an excuse. These assignments are posted in advance. Complete them early to avoid any emergencies preventing you from finishing them before the due date.

Quizzes (WebAssign)

- Quizzes will be taken approximately bi-weekly and will be comprehensive (the course is cumulative and each week builds on skills acquired in previous units).
- Quizzes may have multiple parts: be sure to complete each part of a quiz.
- Unlike homework, **quizzes will be timed.** For quizzes with parts, each part of a quiz will have its own time limit, so students may take a break between the parts.

Final Exam (WebAssign)

The final exam will be comprehensive and will be available the last week of the course. The exam will have 6 parts, which will address different parts of the course and allow breaks between the parts. The total time will not exceed the university limit of 2 hours and 15 minutes.

Assessment Feedback

- Grades will be available in the Canvas Grade Center.
- Grades for assignments are posted automatically at the due date.
- As students work on homework exercises, WebAssign provides several modes of feedback.
- Students will be able to review old homework and use practice problems to drill in preparation for quizzes and exams.
- Any questions about grades may be directed to the instructor.

Late and Make-up Work Policy

Due to the cumulative nature of the course, it is extraordinarily difficult to catch up in this course. To encourage students to keep up, ordinarily late assignments will not be accepted: as noted, WebAssign does not accept late submissions even one second after the posted deadline.

Nevertheless, life happens, and sometimes students need more time to complete an assignment for legitimate reasons. You should send me an e-mail, if possible before the assignment is due, including any relevant documentation, and I will extend your deadline.

Grading and Feedback

Assignments are graded automatically at the deadline.

Assignment Distribution and Grading Scale

Assessment Type	Number of Assessments	Total Percentage
-----------------	-----------------------	------------------

Homework	31 (each assignment counts equally)	60%
Quizzes	6 of 7 (drop lowest) @ 5% each	30%
Final Exam	1	10%
Total Possible Percentage		100%

You can calculate your weighted average grade at any time during the course by using one of the following online tools listed below:

- Blacks Domain Weighted Average Grade Calculator:
http://www.blacksdomain.com/files/Notes/WA_Calculator.php
- Mercer University Weighted Average Grade Calculator
<https://forms.mercer.edu/registrarcalc/weightedaverage.html>

Percentage of Earned Points	Grade
93% -100%	A
90%-92%	A-
88%-89%	B+
83%-87%	B
80%-82%	B-
78%-79%	C+
73%-77%	C
70%-72%	C-
68%-69%	D+
60%-67%	D
Under 60%	F

University Policies

Students are required to be aware of and follow all general and academic policies established by Kent State University. A list of University academic policies is listed under the "University Policies" tab on the [Tips for Online Students page](#).

Students with Disabilities

University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through [Student Accessibility Services](#) (contact 330-672-3391 for more information on registration procedures). The Canvas accessibility statement can be found in the [Tips for Online Students page](#).

Course Enrollment and Withdrawal

University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course.

Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashLine) prior to the deadline indicated.

If registration errors are not corrected by this date and you continue to attend and participate in classes for which you are not officially enrolled, you are advised now that you will not receive a grade at the conclusion of the semester for any class in which you are not properly registered. Also, it is your responsibility to check the withdrawal dates for each semester. For more information, see the "Course Enrollment and Withdrawal" section in the [Tips for Online Students page](#).

Plagiarism and Academic Integrity

Students enrolled in the university, at all its campuses, are to perform their academic work according to standards set by faculty members, departments, schools and colleges of the university; and cheating and plagiarism constitute fraudulent misrepresentation for which no credit can be given and for which appropriate sanctions are warranted and will be applied.

For more information, see the "Student Conduct, Plagiarism, and Academic Dishonesty" section in the [Tips for Online Students page](#).

Notice of Copyright and Intellectual Property Rights

Any intellectual property displayed or distributed to students during this course (including but not limited to PowerPoints, notes, quizzes, examinations) by the professor remains the intellectual property of the professor. This means that the student may not distribute, publish or provide such intellectual property to any other person or entity for any reason, commercial or otherwise, without the express written permission of the professor.

Subject to Change Statement

The syllabus and course schedule may be subject to change. Changes will be communicated via email or the Canvas announcement tool. It is the responsibility of students to check email messages and course announcements to stay current in their online courses.