Philosophy 201: Introduction to Logic

Instructor: David Rose

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I. Course Location and Meeting Times

The course meets on the College Avenue Campus in Millerdoler Hall, Room 100. The course will meet two times a week, on Wednesday 3rd period (11:30 a.m.—12:50 p.m.) and Friday 4th period (1:10 p.m.—2:30 p.m.).

I will also be holding office hours. As of now, I will be holding office hours on Tuesday from 2:00-4:00 and by appointment. If there are any changes in my office hours, I will let you know.

II. Course Description:

This course is an introduction to symbolic logic. Logic is the study of correct reasoning and symbolic logic studies reasoning using formal languages. We will begin with propositional logic. Propositional logic will enable us to represent terms such as "and" and "not" and will also enable us to evaluate various inferences. Then, we will turn to predicate logic. Predicate logic subsumes propositional logic but affords us additional tools to both represent terms such as "something" and "everything" and evaluate inferences.

III. Course Materials

The only required material for this course is the textbook. We will be using *Symbolic Logic: A First Course (2nd Edition)* by Gary Hardegree. The textbook is available online for free at Professor Hardegree's website:

http://courses.umass.edu/phil110-gmh/text.htm

If you would like to have a hardcopy of the book for use, you can purchase one through Amazon. Be sure, though, to order the 2nd Edition since we will be working from this.

III. Core Curriculum Information

Philosophy 201 satisfies a Cognitive Skills and Processes: Quantitative and Formal Reasoning requirement of the Permanent Core Curriculum.

Core Curriculum Learning Goal: Philosophy 201 meets Goal (a): "Apply effective and efficient mathematical or other formal processes to reason and to solve problems."

IV. Tentative Schedule

Date	**Topic**	**Reading**	**Assignment**
9/5			
9/7	Basic Concepts	1.1-1.9	1A-1C
9/12	Truth Functional Connectives	2.1-2.13	2C
9/14	Validity	3.1-3.5	3A-3D
9/19	Translations in propositional logic	4.1-4.17	4A-4B
9/21	Translations in propositional logic	4.18-4.23	4C
9/26	Translations in propositional logic	4.24	4D
9/28	Derivations in propositional logic	5.1-5.5	5A
10/3	Derivations in propositional logic	5.6-5.8	5B-5C
10/5	Derivations in propositional logic	5.9-5.12	5D-5F
10/10	Derivations in propositional logic	5.13-5.14	5G(91-96)
10/12			**Exam 1**
10/17	Translations in monadic predicate logic	6.1-6.5	6A-6B
10/19	Translations in monadic predicate logic	6.6-6.10	6C-6D
10/24	Translations in monadic predicate logic	6.11-6.16	6E-6G
10/26	Translations in monadic predicate logic	6.17-6.18	6H
10/31	Translations in monadic predicate logic	6.19-6.20	6I
11/2	Translations in polyadic predicate logic	7.1-7.3	7A-7B
11/7	Translations in polyadic predicate logic	7.4-7.5	7C-7D
11/9			**Exam 2**
11/14	Derivations in predicate logic	8.1-8.3	8A
11/16	Derivations in predicate logic	8.4-8.6	8B
11/21	Derivations in predicate logic	8.7-8.9	8C-8D
11/28	Derivations in predicate logic	8.10	8E (1^{st} half)
12/5	Derivations in predicate logic	8.11	8E (2^{nd} half)
12/7	Derivations in predicate logic	8.12	8F
12/12	Derivations in predicate logic	8.13	8G

**Note*: The schedule may be revised depending on how quickly we are moving through the material. I will keep you updated on any changes made in the schedule.

V. Grading and Assignments

A. Homework

Each week there will be homework assignments. However, I will only collect *five* homework assignments. Each collected assignment will be worth 2% of your overall grade. Late homework assignments will not be accepted unless accompanied by the appropriate documents.

Important: Collection of assignments will be *unannounced.* So, you should do *all* of the homework assignments, even though only five will be randomly collected throughout the course of the semester. Logic, like mathematics, largely involves acquiring skills rather than merely memorizing facts. To acquire the skills needed in logic, it is important that you practice. Doing so will certainly benefit you when it comes exam time.

B. Exams

There will be three exams. The first exam will take place roughly 1/3 of the way through the semester while the second exam will take place roughly 2/3 of the way through the semester. The final exam will take place during the exam period at the end of the semester. Information on the final exam schedule can be found here: http://finalexams.rutgers.edu/. Each exam will be worth 30% of your total grade.

C. Final Grade Calculation

Homework Assignments—2% each (10% of the overall grade)

Exams—30% each (90% of the overall grade)

Your grade will be determined by the following grading scale:

A	B+	B	C+	C	D	F
100% - 90%	89% - 87%	86% - 80%	79% - 77%	76% - 70%	69% - 60%	59% - 0%

D. Sakai Site

The course will have a Sakai site. I will post lecture slides and you will also be able to keep track of your grade. Additionally, I will post announcements and updates on this page. You can check the Sakai site for this information, but an email will also be sent to you when any information is added to the site. Emails sent through Sakai will be sent to your Rutgers email address. So, if you do not check the Sakai site regularly and primarily use another email aside from your Rutgers one e.g., Google, you should set up the email that you primarily use so that messages sent from Sakai to your Rutgers email account can be forwarded to your primary email address.

The Sakai site can be accessed at:

https://sakai.rutgers.edu/portal

You will need your Rutgers NetID and password to access the site. Once you have accessed the course page on Sakai, you will see several "buttons" on the left hand side of the screen. Lecture notes will be under "Resources"; Grades will be under "Grades"; and Announcements will be listed in the top right corner of the course home page.

VI. Attendance Policy

Here is the attendance statement required by Rutgers: "Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me."

Although you are not formally required to attend this class, since homework assignments will be randomly collected throughout the semester, it is in your best interest to attend the classes.

VII. Policy on Cheating

You can find the current Academic Integrity Policy for Rutgers here:

http://academicintegrity.rutgers.edu/files/documents/AI_Policy_9_01_2011.pdf

Basically, violations include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity.

In this course, **if you cheat, you will fail the course**. You will also be reported to the Office of Student Conduct. There will be *no* exceptions to this policy.