

## **Philosophy 201: Introduction to Logic**

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### **I. Class Times**

- The class will meet two times a week:
  - Monday, TBD
  - Wednesday, TBD
- Office hours will be held by arrangement. Please email a day in advance.

### **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 various connective terms that will allow us to evaluate various inferences. We will focus on determining the validity of arguments and the processes involved in derivations. 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**

- Paul Teller, *A Modern Formal Logic Primer*, Prentice Hall, 1989
  - Accessible at <http://tellerprimer.ucdavis.edu/pdf/>
  - I will be uploading or sharing with you the relevant documents, including the textbook.
  - If you would like to have a hard copy of the book for use, you can purchase one through Amazon (though there may be limited copies, given its free accessibility).

#### IV. Tentative Schedule

-The plan is to cover the material in an effective and timely manner, so this schedule may be adjusted to account for difficult subjects or unpredicted circumstances (weather, alien invasions, etc.), thus flexibility is key.

<u>SCHEDULE</u>	<u>Monday</u>	<u>Wednesday</u>	<u>Exercises</u>
<b>Week 1</b>	No class	Introduction to Course	Ex. 1-4, 1-5, 1-6, 4-6
<b>Week 2</b>	Connectives & Transcription (Vol. I) Ch. 1-1, 1-2	Connective Puzzles & Transcriptions (Vol. I) Ch. 1-3, 1-4, 1-5, 1-6, 4-4, 4-5	Ex. 2-2, 4-8
<b>Week 3</b>	<u>Quiz 1</u> : Connectives & Transcription	Truth Tables & Validity (Vol. I) Ch. 2-1, 2-2, 2-3, 4-1, 4-2	Ex. 4-2, 4-5
<b>Week 4</b>	<i>Ass. 1</i> : Truth Tables & Validity	Truth Trees: Propositional Logic (Vol. I) Ch. 8-1, 8-2, 8-3, 8-4, 8-5,	Ex. 8-1, 8-3, 8-4
<b>Week 5</b>	<u>Quiz 2</u> : Truth Trees for Propositional Logic	Truth Trees: Propositional Logic (Vol. I) Ch. 9-1, 9-2	Ex. 9-2
<b>Week 6</b>	<i>Ass. 2</i> : Truth Trees for Propositional Logic	Natural Deduction: Propositional Logic (Vol. I) Ch. 5-1, 5-2, 5-3	Ex. 5-1
<b>Week 7</b>	<u>Quiz 3</u> : Natural Deduction for Propositional Logic	Natural Deduction: Propositional Logic (Vol. I) Ch. 6-1, 7-1, 7-2, 7-3, 7-4	Ex. 6-1, 6-3, 7-1
<b>Week 8</b>	<i>Ass. 3</i> : Natural Deduction for Propositional Logic	Review	None
<b>Week 9</b>	Exam I	Exam and Course Feedback	Student Course Feedback
<b>Week 10</b>	Group Puzzles and Propositional Challenges	Predicate Syntax & Transcription (Vol. II) Ch. 1-1, 1-2, 1-3, 4-2, 4-3	Ex. 1-4, 1-5, 4-4, 4-7
<b>Week 11</b>	<u>Quiz 4</u> : Predicate Syntax & Transcription	Truth Trees: Predicate Logic (Vol. II) Ch. 7-1, 7-2, 7-3, 7-4, 8-1, 8-2	Ex. 7-1, 7-3, 7-4, 8-8
<b>Week 12</b>	<i>Ass. 4</i> : Truth Trees: Predicate Logic	Natural Deduction: Predicate Logic (Vol. II) Ch. 5-2, 5-3, 5-4, 5-5, 5-6, 6-1, 6-2	Ex. 5-1, 5-2, 5-5, 5-7, 6-2, 6-7
<b>Week 13</b>	TBD	No class	None
<b>Week 14</b>	<u>Quiz 5</u> : Natural Deduction for Predicate Logic	Identity (Vol. II) Ch. 9-1, 9-2	Ex. 9-1, 9-8
<b>Week 15</b>	<i>Ass. 5</i> : Natural Deduction for Predicate Logic	Review	None

## V. Assessments

### -Exercises

-Should be attempted outside of class. There are many, many problems assigned, and I do not expect all to be completed. I do not expect your answers to all be correct. I do expect a thorough attempt at working through the material, as it will be detrimental to your success in this course if you do not put forth a solid effort on the exercises. If you are putting in considerable effort both in class and out of class on the assignments, but feel as though you are falling behind, please come see me during office hours, or at the very least, let me know via email or after class. These exercises are not graded and are there for your practice.

### -Assignments (20%)

-You will be asked to submit assignments with a group every other week, and in this case, you will be graded on correctness.

### -Quizzes (20%)

-Quizzes will occur every other week, starting in Week 3, and they will cover the material from the readings, previous lecture, the exercises from the week and, to a lesser degree, previous readings, assignments, and lectures.

### -Exams (60%)

-Exams will occur during the 9<sup>th</sup> and 15<sup>th</sup> week of the semester. The first will cover all material from the first eight weeks, and the second will be cumulative, covering all of the relevant course material. Exceptional circumstances that lead to missing an exam must be documented and emailed prior to missing the exam. You will then have one week to schedule a time during office hours to take the exam. If an exam is missed for nonexceptional circumstances, you will forfeit said exam grade.

### -Grade Calculation

#### -Assignments (20%)

-Total of 5 assignments graded

-10 points each

#### -Quizzes (20%)

-Total of 5 quizzes graded

-10 Points each

#### -Exams (60%)

-Total of 2 exams taken

-First exam is worth 50 points

-Second exam is worth 100 points

#### -Total (100%)

-250 Points

<u>Grade</u>	<u>A</u>	<u>B+</u>	<u>B</u>	<u>C+</u>	<u>C</u>	<u>D</u>	<u>F</u>
<u>Percentage</u>	100% - 90%	89% - 87%	86% - 80%	79% - 77%	76% - 70%	69% - 60%	59% - 0%
<u>Points</u>	225-250	217-224	200-216	192-199	175-191	150-174	0-150

## **VI. Sakai Site**

-The course will have a Sakai site. I will send all relevant material through the announcement section on the site, as well as relevant announcements about scheduling and feedback. 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.

## **VII. Class Structure**

-Lectures are all posted on Sakai. It is imperative that these are watched, as they are replacing the in-person lectures. The two class meetings per week will serve to cover the material from the lectures, and to clarify any questions regarding the content.

## **VIII. Final Note**

-Do not hesitate to contact me about anything related to the course. I will do what I can to help.

## **IX. Additional Resources**

### *Just In Case Web App*

<http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

### *Counseling, ADAP & Psychiatric Services (CAPS)*

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

### *Violence Prevention & Victim Assistance (VPVA)*

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

*Disability Services*

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

The Office of Disability Services works with students with a documented disability to determine the eligibility of reasonable accommodations, facilitates and coordinates those accommodations when applicable, and lastly engages with the Rutgers community at large to provide and connect students to appropriate resources.