Course Syllabus

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Office hrs: MWF 10:40 – 11:50 and by appointment – or try me anytime I am in (sometimes in the Logic Lab)

Brief Description: Phil 200 is a first course in critical thinking. In this case, critical thinking is introduced through formal logic. We will spend some time introducing the basic notions of logical validity and soundness. Then we will (a) introduce a simple formal language; (b) learn to evaluate validity and truth for arguments in the formal language; (c) translate between ordinary arguments and ones in the formal language; and (d) evaluate validity by means of proofs and derivations in the formal language. This material is foundational to disciplines as diverse as philosophy, mathematics and computer science. It is essential for those who will investigate theoretical underpinnings in such areas; it will be illuminating for those who would undertake further course work or reading in these and related disciplines.

Course Expectations: This is a “basic skills” course with no prerequisites. No logical or reasoning background is assumed. At the same time, it is a challenging (and interesting!) way to satisfy the critical reasoning requirement. In contrast to other courses in the GE critical reasoning category, Phil 200 positions students to consider further courses in logic, and is a prerequisite to the logic courses, Phil 300, 306 and 308 that immediately follow it in the Philosophy logic sequence.

Your professor is obligated to be clear, responsive to questions, provide helpful feedback on work, and so forth. At the same time, you cannot expect to succeed without regular class attendance, class participation, appearance at office hours, and especially faithful, on-time completion of homework! We need also to respect one another by observing basic rules of course etiquette: Apart from special arrangements, arrive on time, do not leave early, or come and go during class. If you are in the room, be engaged in class activities (not surfing the web, playing with your phone, reading for other classes, or the like). Apart from special arrangement, phones should remain off (not on vibrate) during class; if one rings do not answer; as this can be difficult to remember, if your phone rings during class, the “penalty” is to bring cookies for all at the next class meeting.

Texts: The text for this course is a manuscript by Prof Roy, Sentential Logic, excerpted from the longer Symbolic Logic: An Accessible Introduction to Serious Mathematical Logic. It is available in the Bookstore. The text is also online at http://rocket.csusb.edu/~troy/int-ml.htm. Though the electronic copies have value, everyone will need a bound hardcopy of their own.
**Grading:** Grades are based on homework (20%), midterm tests (40%), and a final exam (40%). There is also some opportunity to obtain extra credit.

(a) Homework is regularly assigned in class and due at the beginning of the following period. Homework is marked on a 2-point scale as follows: 2 homework is complete; 1 at least half complete; 0 missing or less than half complete. If a homework is complete but “botched” it may be returned with a tutoring referral form, to receive credit only after it is returned with the completed form from a lab tutor. Homework is typically returned with comments --- however your score is based on problems seriously attempted, not correctness.

Some homework is to be completed in the logic lab. Typically there is an incentive to complete the work on time, but flexibility is allowed for schedules that do not match well with lab hours. These computer assignments “double count” into regular homework or extra-credit categories according to the assignment schedule.

Homework samples regular effort and attendance; thus no late homework will be accepted, and there is no makeup for this part of the grade apart from compelling, continuing reasons. However, the final homework score is calculated by dividing points earned by two less than the points possible; the effect is to “forgive” one missing assignment or, if all assignments are worked, to treat one assignment as extra credit. You will find the assignment schedules on the courses section of the webpage linked under our course at [http://rocket.csusb.edu/~troy/courses.htm](http://rocket.csusb.edu/~troy/courses.htm).

(b) There will be about three midterm exams over the term. Except for a take-home essay component drawn from “explain to Hannah” exercises at the end of each chapter, these are short closed-book examinations with questions drawn entirely from homework or extra credit problems. There is no makeup for these exams! However, the lowest exam score will be dropped. For compelling, continuing and documented reasons, credit for one of these exams may be shifted from the final. Explain to Hannah essays will be regularly assigned and collected as part of the exams.

(c) The final is a comprehensive exam of material covered during the course. It will be given during the regular exam period (01: F 6/17 8:00; 02: W 6/15 8:00; 03: F 6/17 12:00). Explain to Hannah essays not collected in any given midterm may be included in the final.

(d) Extra credit assignments will be regularly assigned along with homework. Assignments are designed to go with corresponding homework, but will be accepted up to the next exam. *Clearly indicate assignment numbers!* A student who completes every extra credit problem may increase the total grade by 5%. Most extra credit problems are associated with the Logic Lab. For extra credit, it will be sufficient to turn in a print of the page(s) showing that the work has been done.

**Grading Notes:** All grading is numerical. Grades are not curved. Given your weighted score, you may expect to receive at least the grade associated with the usual scale: ≥ 90% for an ‘A’, ≥ 80% for a ‘B’, and so forth.
Given the way it is scored, homework is an effort component of the grade worth the same as a midterm. Even a student who is struggling on exams can significantly boost their overall grade with a strong homework score. But by the same token, a student who does well on exams can have their overall score significantly dragged down by missed homework. So it is important to put in the effort.

You may choose any method for getting homework done (short of xeroxing or printing the work of another student). In this class you are encouraged to work in the Lab, work together with other students, and even to “repair” a problem or two when you are given a chance to ask questions in class. But NOTE: Unless you have successfully worked problems of the sort assigned in homework, you may be sure that you will not pass the exams!

With this said, all work on exams, including essay portions, is to be your own. Academic honesty is always essential. Plagiarism will result in an automatic F for an assignment and up to an F for the course along with standard University discipline. Because this issue is so important, be sure you know what plagiarism is! If you have any questions or concerns about plagiarism, please talk things over with Prof Roy. See also “What is Plagiarism?” linked from my website http://rocket.csusb.edu/~troy/courses.htm and also the CSUSB Bulletin http://bulletin.csusb.edu/academic-regulations/ (search for ‘plagiarism’).

Order of Instruction

I. Basic Notions for Argument Evaluation SL, Ch 1
II. Formal Languages SL, Ch 2
III. Truth and Validity SL, Ch 4
IV. Translation SL, Ch 5
V. Proof and Validity SL, Ch 6

Details: The CSU faculty union is in the midst of a contract dispute with administration. It is possible that faculty will be on strike April 13-15 and 18-19. Prof Roy will be out on any strike days.

There are no adds after the census date. If you are in need of an accommodation for a disability in order to participate in this class, please let Prof Roy know as soon as possible and also contact Services to Students with Disabilities (UH 183, 537-5238). If you require assistance in the event of an emergency, you are advised to establish a buddy and alternate buddy from our class; individuals with disabilities should prepare for an emergency ahead of time with their ‘buddies’ and the instructor.

Everyone should receive messages from their CSUSB e-mail. An easy way to do this is to set it up to forward to your regular address.
Tutoring is available for this course through the philosophy Logic Lab. Lab hours are posted at http://philosophy.csusb.edu/logicLab.html and are partially supported by the CSUSB Student Success, Graduation and Career Placement Fee Initiative.

The payoff: Some, perhaps just a few, will find the problems we address in this course completely fascinating. Others may struggle with the abstract and seemingly impractical nature of the work. I do hope your reaction will be the former rather than the latter! It is, of course, part of a general education to have some exposure to basic logical concepts. And our course is a gateway to further coursework in logic and foundations of mathematics and computer science. But, further, perhaps just because of its abstract and difficult nature, we shall introduce concepts and a kind of reasoning that may be new to you. This rigorous mode of thought that is required to do logic will benefit you throughout your university career and in life more generally. That is why this course is part of the required General Education package! For more information, see http://philosophy.csusb.edu/programDegrees/index.html.