

TEXTS: *Modern Formal Logic, Second Edition* (2006, 2007), Thomas J. McKay
(at SUBookstore) (*Read the notes concerning the text at the end of the syllabus.*)

Logic Exercises, Part I, Brown & McKay (at SUB)

Part II will be available in October.

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If you can't find him, ask the staff in the Philosophy Department Office
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Office hours TBA.

You should go to the office hours for your discussion section instructor, if possible. You may go to the office hours of another instructor if it is not possible to go to your section instructor's hours or to make a suitable appointment.

ASSIGNMENTS

Reading assignments are in *Modern Formal Logic*. Exercise assignments are in *Logic Exercises*. Exercise numbers in brackets, e.g. [21-24], indicate exercises that are important to do but that should not be turned in. (You will be able to check your own work on these.) Exercises omitted from the list of exercises due, e.g. 31-32, are not required. This schedule may be amended during the semester.

| Date | Reading | Homework |
|-------------|-------------------------------|--------------------------------|
| Aug 28 | Chapter 1 (and this syllabus) | |
| Sept 2 | Chapter 2 | EX 1, [2-3] |
| Sept 4 | Ch 3 | 4, [5-6], 7 |
| Sept 9 | Ch 4 | 8-11, [12-15] |
| Sept 11 | Ch 5 | 16, [17-18], 19, 20, [21-24] |
| Sept 16 | | 25-28, [29-30], 33-36, [37-38] |
| Sept 18 | Ch 6; 119-126 | 39, 40, 41 |
| Sept 23 | FIRST EXAM | Covers chapters 1-5, Ex 1-40 |

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| Sept 25 | Ch 6; 127-138 | [42-47] |
| Oct 2 | Ch 7 | 48, [49-50], 51, [52-55] |
| Oct 7 | Ch 8 | 56-60, [61-62] |
| Oct 14 | Ch 9 | 63 |
| Oct 16 | | 64-66 |
| Oct 21 | SECOND EXAM | Covers chapters 6-8, Ex 41-62 |
| Oct 23 | Ch 10 | 67, [68-69] |
| Oct 28 | Ch 11 | 70-76 |
| Oct 30 | Ch 11 | |
| Nov 4 | THIRD EXAM | Covers chapters 6-9, Ex 41-76 |
| Nov 6 | Ch 11 | TBA |
| Nov 11 | Ch 11 | TBA |
| Nov 13 | Ch 12 | TBA |
| Nov 18 | Ch 12 | TBA |
| Nov 20 | FOURTH EXAM | Covers chapters 10,11 |
| Nov 25 | Ch 13 | TBA |
| Dec 2 | Ch 14 | TBA |
| Dec 4 | Ch 15 | TBA |
| Dec | FINAL EXAM | Covers Chapters 1-15 |

LOGIC

We would like to be able to say when we have good reasons for accepting a conclusion. In PHI 251 we undertake a systematic study to develop an understanding of the standards for deductive reasoning; this is the study of valid argument. In developing this understanding, we learn how to distinguish valid arguments from invalid ones, and we learn how to show that an argument is valid (if it is) and how to show that an argument is invalid (if it is invalid).

In looking at the expression of arguments, we examine two general types of argument structure: structures that are distinguished by the way that compound sentences and their constituents are related in arguments, and structures that depend on the features of both compound sentences and quantifier words (like 'all' and 'some'). We connect linguistic structure with validity of arguments and see how the study of linguistic structure is the foundation for recognizing valid arguments and for showing that they are valid.

In addition to validity, we will study a number of related concepts, such as inconsistency, logical equivalence, and logical truth.

The material that we study in this course concerns the foundation of reasoning about all subjects. The particular analytic tools that we develop are especially important for study in philosophy, computer science, linguistics and mathematics.

All of this will become much clearer during the semester.

ASSIGNMENTS: There are many exercises that enable students to develop and to test the mastery of the concepts and abilities that are central to the course.

GRADING: Each of the first four one-hour examinations will be worth 100 points. The final examination will be cumulative, and it will be worth 200 points. The exercises will be worth 1 point per page, up to a maximum of 100 points. The point will be awarded if most of the work on that page has been completed correctly and submitted on time. You may also earn up to 50 points for class attendance and participation. Thus the maximum possible numerical grade is 750. The final grade is determined on the basis of this numerical grade.

EXERCISES: It would be impossible to overstate the importance of the exercises in this course. Most of what you learn in this course you will learn by doing the exercises. It will be difficult to do well in this course without considerable, mostly successful, work on the exercises. Turning in the exercises will make it possible to find out about your mistakes before the exam rather than after. All exercises are to be turned in on the days indicated. Exercises turned in late will not be counted. (There may be announced adjustments to this schedule if the lectures fall behind the syllabus or go ahead of it.)

If you find that there are exercises that are due but you do not know how to finish them, then you should meet with a teaching assistant or with Professor McKay as soon as possible, so that you do not fall further behind.

READING: You should do the indicated readings before class, so that you have a chance to think about what questions you have concerning the material. If the lecture and discussion in class do not answer your question, make sure to ask it. Preparing questions, asking questions, and hearing the answer and any related discussion are all excellent ways of making sure that you learn the material. Asking questions will also raise your grade. (This is one way that not understanding the material can help to raise your grade.)

CLASS PARTICIPATION: You will develop abilities: to distinguish valid reasoning from invalid and to show that an argument is validly reasoned or that it is not. It is very difficult to develop these abilities from a book alone. A book is good for presenting a completed analysis or demonstration, but it is not as good for showing how to develop an analysis or demonstration. For this reason, it is very important to attend class regularly and participate in the process of applying the concepts and methods we will study.

NOTE: some people find the first part of the course very easy and are misled into thinking that the rest will also be easy for them. This mistake always has serious negative consequences if it leads to neglect of the homework or uneven attendance in class.

CELL PHONES: Please turn off all cell phones (and any other noisemakers) during class.

DISABILITY-RELATED ACADEMIC ACCOMMODATIONS: Students who are in need of disability-related academic accommodations must register with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498. Students with authorized disability-related accommodations should provide a current Accommodation Authorization Letter from ODS and review those accommodations with Professor McKay. Accommodations, such as exam administration, are not provided retroactively; therefore, planning for accommodations as early as possible is necessary. For further information, see the ODS website, <http://disabilityservices.syr.edu/>.

EXAMS: There are four one-hour exams and a two-hour final. Students must show that they can identify and analyze examples, determine which logical characteristics apply, and show that they apply. There are no essays (of more than one paragraph) required.

If for any reason you cannot attend an examination at the scheduled time, it is your responsibility to contact Professor McKay before the exam to arrange a make-up. This is a matter of courtesy in any course, but it is also a requirement of this course. If a last-

minute emergency arises, you are still responsible for getting word to Professor McKay before the examination, even if it is only by a call to the department secretary (x2045).

HONESTY: It is OK to work with others in doing the exercises; in fact, we think that you will probably enjoy the course more, do better and retain more if you do. But you should actively participate in all work that you hand in. Copying answers worked out by someone else violates academic ethics. In addition, you won't learn very much that way.

In examinations it is against academic regulations to copy from the work of others, or to copy from or consult prepared materials other than those provided with the examination. It is equally unacceptable to provide help to others, and you are expected to take reasonable precautions to prevent copying of your work. Academic dishonesty is an extremely serious offense, and may result in expulsion from the University.

It is important that examinations be free of cheating, and it is almost as important that everyone be confident that this is so. For this reason it is not enough that you should avoid cheating; you should also take care that no sane person can believe that you are cheating. During exams, do not sit near anyone you know, and do not talk to anyone. This will help to prevent any appearance of collaboration.

TUTORING: The section instructors and I will have office hours and will make appointments to meet with you at other times. Also, the Tutoring and Study Center (www.tutoring.syr.edu) can arrange for you to work with students who have previously done well in this course. We encourage you to make use of these services (our office hours or TSC) whenever you are having difficulty in doing the homework. It is important to deal with any difficulties right away, so that they do not interfere with further progress in the course.

EMAIL and BLACKBOARD: I will sometimes use the Blackboard system to send email to you. These notices (changes in schedule or assignments, notices of emergency cancellations, corrections to announcements made in class, etc.) will go to your SU email address. So you must make sure that you receive that email. If you use another account, have your SU email forwarded to that account.

I will also sometimes post class hand-outs, sample exams, review sheets or other material on the Blackboard course site. So you should make sure that you can sign on to it. (You can sign on through MySlice. This syllabus will be posted there, so you can get a fresh copy if you lose this one.)

COURSE EVALUATION: During the semester, I may ask you to advise me about how the course can be more useful for you, and at the end of the semester I will ask for your evaluation of the course. This information is very useful in developing a better course.

SPECIAL NOTES CONCERNING THE TEXTBOOK: There are two versions of the **second edition** of the textbook, *Modern Formal Logic*. Either version is OK to use. Almost all of you will have the second version (ISBN 0-759-36787-6). For those few who may have the first version of the second edition (ISBN 0-759-34633-X, "faces" on the cover), that version has an incorrect index; if you have the first version, you need to make the adjustments indicated below.

In the index for the first version of the second edition (ISBN 0-759-34633-X), you can make these adjustments:

For Part I of the book, pages 3-116, add 2 to any page reference in the index in order to find the right location. (If the index says '19-23', the actual pages are 21-25.)

In Part II, pages 117-216, add 4.

In Part III, pages 217-382, add 6.

You might want to make a note of this at the beginning of your index, if you have the first version of the second edition. I apologize for the inconvenience.

We have copies of a corrected index that we can give to anyone who has the first version of the second edition of the text.

I will provide a list of typos soon. (This applies to both versions of the second edition. The only differences between the two versions are the index, the cover, and the ISBN. All other errors are faithfully preserved in the second version.)

(The typos will be corrected in the third version of the second edition, to be available later this year, but not in time for this semester.)

The following might not apply to anyone at this point, since the first edition is not generally available. Just in case: **Do not use the first edition** of *Modern Formal Logic*, from 1989 for the hardback version (ISBN 0-02-379286-8), from some time in the 1990s for paperback versions. There are some changes in Chapters 4 and 7 that carry through the rest of the book, and some very significant changes in Chapters 11-15. Trying to use a copy of the first edition will be confusing. (The first edition is available from some online sellers, but you should not buy it unless you are a book collector.)