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| COURSE INFORMATION | Location: | MTH 215 |
| | Class Times: | MWF 10:00-10:50 and 11:00-11:50 |
| | Instructor: | Dr. Karl Frinkle |
| | Office: | MTH 112 |
| | Office Hours: | MW 12:00 – 14:00, TR 11:00 – 13:30, F 12:00 – 13:00 |
| | Office Phone: | (580)745-2028 |
| | E-mail: | kfrinkle@se.edu |
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TEXT *Introduction to Logic and to the Methodology of Deductive Sciences* (2nd revised edition),
by Alfred Tarski, ISBN # 0-486-28462-X

COURSE OVERVIEW In this course, we will cover such topics as the elements of logic, sentential calculus, theory of relations and the deductive method as well as applications of logic to constructing mathematical theories.

As a general education course, this course will satisfy the goal of the mathematical or quantitative reasoning component of general education: to develop the ability of students to understand and apply mathematical abstraction. As such, students will (1) solve problems using the principles of algebra or symbolic logic; (2) apply mathematical reasoning to analyze and interpret quantitative information; and (3) use and interpret mathematical formulas.

COURSE WORK We will cover most, if not all, of the topics from chapters 1 through 5. There will be a large emphasis placed on group discussions regarding reading assignments and the corresponding homework problems.

You will be expected to read the material for each day's lecture in advance. See the *reading.pdf* document on the website for a breakdown on when we will cover specific material. **Reading quizzes** will be given each day at the beginning of class over this material. In addition to reading comprehension questions, there may be problems based on material we have already covered. Quizzes count for 20% of your final grade.

By reading the material ahead of time, not only will you perform better on the reading quizzes, but you will be able to interact in an intelligent manner during class time. **Class participation** is worth 15% of your final grade.

Homework will be assigned on a weekly basis over material covered during the week and will be located on the website. The homework will be challenging and you should not wait until the last minute to start working on it. This portion of the class counts for 40% of your overall grade.

There will be no chapter exams, only a **cumulative final exam**. The final exam will be take home, and will be distributed two weeks before the scheduled final exam date. You will have two weeks to work on it, and then you are to hand it in before the given deadline. If you are even one second over the deadline, your exam will not be accepted. You will also not be able to work in groups, use the internet or use any other outside the course material, besides talking to me. The final exam will be 25% of your final grade.

COURSE GOALS The book we will be using is a classic treatise on the field of logic by one of the founders of modern logic. As such, it may not be the easiest read. One of the major goals of this course is to have you, the student, learn to read and fully interpret this text.

One of the major outcomes of successfully reading this book, and taking this course, will be the ability to form logical arguments, interpret logical arguments, and derive conclusions correctly from assumptions and statements.

Furthermore, the rules and methods of logic will be applied to the foundations of mathematics, and will hopefully give you an appreciation for how much the field of mathematics relies on logic.

POLICIES

You will not be able to make up a quiz or receive credit for any other assignment which you missed the deadline for unless you notify me ahead of time. Given prior notification of an absence, I will ensure that you can take the quiz or hand in your homework at a more convenient time.

Cheating will not be tolerated in any shape or form. If you are caught cheating, it will be reported to the appropriate academic offices, and appropriate action will be pursued and you will fail the course.

All cell phones, pagers, CD players, laptops, calculators and other such devices must be turned off and put away before class begins. It is also expected that everyone will behave in a kind and courteous manner towards fellow students and the instructor.

If you are caught using a cell phone or any other electronic device during class, your final grade will be dropped **by one letter grade per incident**.

I reserve the right to change any policies as I see fit to ensure that you are indeed receiving the best possible education that I can give you in the subject matter at hand. If I feel a certain aspect of the course does not appear to be effective in its method, I will attempt to change it (for the better I hope). All changes will be made in writing.

GRADES

Your final grade will be based upon the following items

- 40% - Homework - required to be handed in on a regular basis
- 20% - Reading quizzes - given at the beginning of every class
- 25% - Final Exam - exam covering all of the material from the semester
- 15% - Class participation - interaction during class, and in projects/presentations

IMPORTANT DATES FOR FALL 2012

- 2012.08.20 - Classes begin
- 2012.08.24 - Last day to enroll in or add classes
- 2012.08.24 - Last day to drop a class with no grade record
- 2012.08.24 - Last day to drop a class with refund/no charges
- 2012.10.17 - Last day to drop a class with automatic W
- 2012.11.01 - Last day to complete final application for graduation
- 2010.11.16 - Last day to drop a class
- 2010.12.14 - Classes end

SPECIAL ACCOMMODATIONS

Any student needing special accommodations due to a disability should contact the Coordinator of Student Disability Services, Student Union, Suite 204 or call (580) 745-2254 (TDD# 745-2704). It is the responsibility of each student to make an official request for accommodations to the Coordinator. For additional information, see the Americans with Disability Act on the Southeastern Online Learning website or <http://www.se.edu/ada/>