

## **Syllabus — MAT 300 — Mathematical Structures**

Spring 2004 — 10:40 – 11:55 am, Tuesday and Thursday PSA 303

Instructor: Dr. Michelle Zandieh

Office: PSA 633 — Office Hours: MON 1-2 pm am and WED 11 am -12 noon and by appointment

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[http://math.la.asu.edu/~zandieh/MAT\\_300\\_Spring\\_2004.html](http://math.la.asu.edu/~zandieh/MAT_300_Spring_2004.html)

Teaching Assistant: Jessica Knapp — knapp@mathpost.asu.edu

Office: PSA 641— Office Hour: TUES & THURS 1-1:30 pm

### **Course Description:**

This course will introduce the topics of logic and set theory, induction, functions, order and equivalence relations, and cardinality with an emphasis in learning to write proofs. Prerequisite: 1 semester of calculus or instructor approval. The book required for this class is *Mathematical Thinking and Writing: A Transition to Abstract Mathematics*, by Randall B. Maddox.

**Homework:** Assignments will be due approximately weekly. You are responsible for keeping track of assignments if you miss class. Your score on all homework will be added and then scaled out of **150** points. Of the homework problems assigned, all will be checked for your attempt, some surprise subset will be graded carefully.

**Email Journal:** From time to time, usually once per week, you will be asked to write a short, reflective reply to a question given in class. This reply would ideally be sent to MAT300Spring04@hotmail.com, by email before the class it is due, but may be brought to class, on paper or disk, if email is inconvenient. Each journal will be graded out of 2 points with full credit for any relevant response of the requested length. Your score on all journals will be added and then scaled out of **20** points.

**Exams:** There will be three tests and a final exam. The first test will take place on February 12<sup>th</sup>. The second test will take place on March 11<sup>th</sup>. The third test will take place on April 15<sup>th</sup>, and the final will be on Friday May 7<sup>th</sup> from 10–11:50 am. Each of the tests will be graded out of 100 points. The final exam is worth 150 points for a total of **450** points.

**Grades:** In total there are **620** points possible for the course. Grade cut offs are 90% (558 points) for an A, 80% (496 points) for a B, 65% (403 points) for a C, 55% (341 points) for a D.

**Academic Honesty:** Anyone found cheating will not be permitted to withdraw and will receive a grade of E for the course. Discussing solutions to homework problems with others is strongly encouraged, but submitting work as your own which is copied or paraphrased from someone else is not permitted. If you are doing things right, your written work will sometimes contain an idea from another source (person, book, other). When this happens, make sure that you have reflected on the idea so that you understand it for yourself. Then write the idea in your own words and give your source due credit. Less than this will be considered cheating.