

## SPRING 2014 : MATH - 1 , Section #14

### GENERAL INFORMATION

Instructor:	DR. D. RAMACHANDRAN ~ <b>Dr. R.</b>
Office:	Room BRH-132 - Brighton Hall
Office Hours:	T Th 10:30 a.m. – 11:15 a.m. T Th 2:45 p.m. – 3:30 p.m. ALSO BY APPOINTMENT
Title:	MATHEMATICAL REASONING
Catalog Description:	This course is recommended for students whose majors do not include a specific mathematics requirement. The course objectives are to show some of the essence and quality of mathematics, and to enhance precision in the evaluation and expression of mathematical ideas, thereby developing a student's quantitative reasoning skills. This course is designed to give students an understanding of some of the vocabulary, methods, and reasoning of mathematics with a focus on ideas.
Prerequisites:	Math 9 or three years of high school mathematics which includes two years of algebra and one year of geometry; completion of the ELM requirement.
Learning Objectives:	Understand and develop appreciation of the structure, elegance, rigor and the beauty of mathematics and mathematical ideas. Introduce the vocabulary, methods and reasoning from the areas of Set Theory, Number Theory, The Real Number system, Counting Methods, Probability and Statistics, and Consumer Mathematics.
Class Hours:	T Th 12:00 noon – 1:15 p.m. in TAH–1007
Text:	<i>Mathematical Ideas</i> by Miller, Heeren and Hornsby, Twelfth edition
Coverage:	We will closely follow the text and cover chapters 1, 2, 5, 6, 10, 11, 12, and 13. There will be <u>three</u> midterm tests and a <i>comprehensive</i> final examination.

Homework: Problems from the exercises section in the text will be suggested for practice. Since this class is offered in the distance education format homework will not be collected and graded. Some homework using *MyMathLab* will be assigned periodically. The students should regularly solve the assigned problems and use the services of the Math Lab (BRH–118) to ensure they have learned the techniques correctly.

Writing Component: MATH 1 satisfies Area B4 of the GE requirements. Students are advised to practice interpreting the results of mathematical solutions using technical and non-technical language while solving assigned word problems dealing with real life situations. Assignments will involve writing and understanding complex technical prose, interpretation of theoretical concepts, and use of mathematical ideas to accomplish a variety of tasks. Class discussions will emphasize this writing component requirement of the course through the above criterion.

#### EXAMINATIONS:

- TEST 1 ON 2/27/14 (THURSDAY, 12:00 a.m. to 1:15 p.m.)
- TEST 2 ON 4/3/14 (THURSDAY, 12:00 a.m. to 1:15 p.m.)
- TEST 3 ON 5/1/14 (THURSDAY, 12:00 a.m. to 1:15 p.m.)
- FINAL EXAM ON 5/20/14 (TUESDAY, 12:45 p.m. to 2:45 p.m.)

Grading:	MIDTERM TESTS	60%
	FINAL EXAM	40%

Letter grade will be assigned on the basis of a weighted average score according to the above weighting scheme and the guidelines in the latest catalog.

- Drops: You may drop this course without penalty until Friday, March 7, 2014. For procedural details refer to the DROP POLICY document of the CSUS Math & Statistics department. On or after March 10, 2014 you MUST be passing this course (with a grade of C or better) and must comply with the department's DROP POLICY in order to drop this course without penalty.
- Attendance: Since this is the remote section of a Distance Education class, the class dynamics requires your conscious effort to go over the class material regularly and completing all assignments. You should regularly consult the web page to keep yourself informed of new assignments and their deadlines. Experience shows that such effort is highly correlated with good performance in the course.
- Homework problems and general information about the course will be posted in my website at **<http://www.csus.edu/indiv/r/ramachandrand/>**
  - NO MAKE-UP TESTS WILL BE GIVEN.