SPRING 2014: MATH - 1, Section #13

GENERAL INFORMATION

Dr. D. Ramachandran \sim Dr. R. Instructor:

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 ARC-1010

Text: Text: Mathematical Ideas

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 three midterm tests and a *comprehensive* 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 studio section of a Distance Education class, the class dynamics requires your regular attendance

and participation in discussions. You should go over the class material

regularly and complete all assignments in timely fashion. You should regularly consult the web page to keep yourself

informed of new assignments and their deadlines.

If you do not attend regularly your spot in this section may be switched with that of a student from the remote section who

is willing to attend the class regularly.

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.