Chaminade University of Honolulu
Fall Semester 2001

Course: MA100: Survey of Mathematics

Time and Place: Tu-Th 11:00 - 12:20

Instructor: Dr. Roger Taylor

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Textbook: Smith, Karl J., **THE NATURE OF MATHEMATICS**(8th Edition), 1998,
                       Brooks/Cole Publisher.

Course Description

Introductory course for humanities and education majors. Selected topics to acquaint the student
with the field of mathematics. Fulfill Track A general education requirement in mathematics. This
is a terminal course and does not prepare the student for MA102, 103, 110, 210. 3 credit hours.

Objectives

To introduce the student to a wide variety of topics in mathematics with emphasis on mathematical
reasoning; to encourage a logical approach to the solution of problems; to create a positive attitude
toward mathematics; and to foster an appreciation of the beauty and power of mathematics.

Teaching Philosophy:

Responsibility for **your** learning rests solely on **you** the student. **You** have to do the classwork, **you**
have to ask the questions, **you** have to do the homework, and **you** have to perform on quizzes and
tests. I am only a guide and record keeper. **You** are also responsible for knowing or **updating
yourself** on all prerequisite information.

Topics to Cover

Chapter 1 Problem solving. 1.1 to 1.4   Chapter 6 Interest, installation buying 6.1-6.2
Chapter 2 Logic 2.1 - 2.5   Chapter 7 Geometry 7.4 - 7.6
Chapter 3 Calculation 3.3 - 3.5   Chapter 9 Probability 9.1 - 9.5
Chapter 4 Numbers 4.2, 4.5   Chapter 10 Statistics 10.1 - 10.2
Chapter 5 Algebra 5.3

Format:

Each class will usually start with my answering questions about the homework. Then, I will lecture, demonstrate problems and good technique for writing solutions, assign problems to be worked at your seat/chalkboard and circulate to get feedback and help you on your seatwork. Students may be asked to present solutions on the chalkboard. We will have daily quizzes and monthly tests, as well as a comprehensive midterm and a final exam in the last week.

Homework:

Students learn mathematics by doing mathematics. It isn't usually enough to just listen to my lectures. Homework (to be done on 8.5" x 11" paper) will be assigned daily. You must show your work for full credit. Your name, date, page numbers and problem numbers should appear at the top of each homework and each assignment should start on a new paper. All homework will be due at the end of the question period. I will time stamp each day's homework.

Notebook: Each student will keep a loose-leaf notebook (8.5" x 11") composed of 4 sections: 1 Class notes and class work, 2 Returned homework, 3 Tests and quizzes, and 4 Extra work. A well-kept notebook with an abundance of extra credit work consisting of problems you solve that haven't been assigned, can be worth up to a 5% bonus on your final grade. You should also include examples from Chapter Summaries and Chapter Tests even if I don't assign them as your quiz and test questions will be similar to these. Check your answers as you go along. I will check this notebook periodically.

Evaluation:

Your grade will be based on the following:

90-100 % A		All tests 25%
80 - 89 % B		Take home exercises 10%
70 - 79 % C		Quizzes 15 %
60 - 69 % D		Class Participation/Chalk Board Presentations 20%
0 - 59.5 % F		Midterm 10%
		Final exam 20%

Learning Outcome Assessment:

*Knowledge of the subject matter from the textbook, media articles, class lectures, discussion.
*Ability to present a short discussion on a mathematical topic.
*Ability to apply mathematical ideas to current issues in society.
*Clarity and logical presentation.

Roger Lee Taylor, PhD