

# CHAMINADE UNIVERSITY - MA100 SCHOFIELD

**Instructor:** Dr. Trevorrow

**Class Times:** 10/4/10-12/16/10 Wednesdays from 5:30 - 9:40 PM

**Office Hours:** Before and after class, Saturday afternoons by arrangement.

**Email:** arithmetic.math@gmail.com or torrance.trevorrow@adjunct.chaminade.edu

**Text Book:** The Nature of Mathematics, 11th edition, by Karl Smith. Brooks/Cole Publishing Company: ISBN 0495012726 (text only). A student solutions manual may also be helpful ISBN 049510809X. Prices vary depending on source. You may also wish to purchase specific chapters or rent the text - [www.cengagebrain.com](http://www.cengagebrain.com). See class schedule.

**Course Description:** (from the catalog) 3 Credits. Mathematical thought is studied through interactions between the foundations of knowledge and the study of the nature of both algebra and geometry. Issues of mathematical thought are addressed through selected studies of the nature of sets, logic, numbers and operations, algebra, geometry, measurement, financial management, probability, statistics, graphs and functions and mathematical systems. This course fulfills the Track A general education requirement in mathematics. The course is intended as a terminal course and is not a prerequisite for any other course in mathematics.

**Prerequisites:** The student should already be competent with basic arithmetic, fractions, percents, and elementary algebra.

**Course Goals:** To enhance the student's mathematical knowledge and abilities. Mathematical style and perspectives are developed and analyzed from the text using a variety of problem solving examples and critiques.

**Course Objectives:** At the completion of this course the student should be familiar and demonstrate competency with the following topics and concepts (subject to change).

- ▶ Problem Solving, mathematical style and modeling
- ▶ Inductive and Deductive Reasoning, Scientific Method
- ▶ Scientific and Exponential notation, order of operations, reasons, applications
- ▶ Sets, Venn / Euler diagrams, concepts and uses in problem solving
- ▶ Set Operations, rules, applications, a way to solve some types of problems
- ▶ Finance and Interest, types of loans, inflation, compound interest
- ▶ Installment loans, add on interest, credit card interest, Apr.
- ▶ Frequency distribution, graphs, types, advantages, disadvantages, reading
- ▶ Descriptive Statistics, central tendency - measures, dispersion, applications
- ▶ Probability, terms, union, intersection, (and,or), spinners, cards, die/dice
- ▶ Expected Value, time value, extended warranties, games, contests

**Primary Chapters:** 1,2,11,13,14

**Methodology:** Most of your learning will come from class careful reading of the text, taking comprehensive class notes and participation in activities. Multiple quizzes, discussions, and articles will be used to reinforce learning. Class will normally begin with a discussion topic, media article, or quiz, followed by text material.

**Success:** All courses require a high degree of personal responsibility and time management skills. Grades tend to be proportional to the personal effort that is taken for the learning process. Universities often recommend 2-3 hours of study time for each hour of class time. For a three credit class a common estimate is 8-12 hrs per week in addition to class time.

**Grading:** Points will accumulate and be converted to a percent. Classwork (Homework, Quizzes, Papers, Presentations, and Notes) 50%, Final 50% (less than 60% on the final exam will be failure for the course). Total score is multiplied by the percentage of class attendance. Changes may be made to the course and grading at the instructor's discretion. Any questions about your grade, please see the instructor after class.

- A 90% + Outstanding Scholarship and excellent initiative with course
- B 80% + Superior Quality done in a consistent intellectual manner
- C 70% + Satisfactory showing competent understanding of course
- D 60% + Lowest passing grade, inadequate for prerequisites
- F <60% Unsatisfactory understanding and class work

**Late Work:** Work is due as assigned. Any requested work is due at the start of class. Work not compliant with specified standards will not be accepted.

**Attendance:** Active and early participation is vital to your success. Each student is accountable for all the information presented in class and to present work by the due dates. Entry and exit only during class breaks to avoid disruption. Absence from class is rounded to the nearest hour. Class starts promptly at 5.30pm you should be seated, ready for work.

Guidelines from the undergraduate catalog indicate that if you miss more than a week of classes you are subject to a grade reduction; missing two weeks of classes may result in notification to appropriate authorities and possible withdrawal. Should an illness or personal reasons necessitate continued absence the student should officially withdraw.

**Academic Integrity:** All material submitted in fulfillment of course requirements must be done by the registered student. Cut and paste research, copying, substitute work, sharing quizzes or homework will result in a grade of zero and possible failure for the course.

**Supplies:** Text Book, Ruler (cm, inches), Calculator with exponential functions. Other items may be required (graph paper).

**Resources:** The text and class information are the primary resources for the course. Often re-reading the same section of the text (several times) will help more than searching for other material. Your instructor is always available before class and by email.

**Requirements:** You are required to immediately seek clarification on any material that you do not understand. All submissions should show complete working, clear explanations and identification of the material being presented. Any graded material must be picked up during that class. It is your responsibility to learn how to use your calculator.

You are expected to maintain standards of academic performance and courtesy and to comply with all CUH policies. Any requests from the instructor require a prompt response. Should you decide to withdraw from the course please let me know. Any disruption to the class, instructor or your fellow students will result in expulsion from class and at the very least a marked absence for that day.

**Finals:** The final is given during the last day of class and will not be available at any other time. Usually the final is written, closed book, no notes, calculator permitted. Formulas may be provided. Write your name on each page, no name = zero grade.