



**Chaminade**  
**University**  
OF HONOLULU

## MA100 SURVEY OF MATHEMATICS

Semester : **Summer 2013 - Online**

**Class** : Online (10 Weeks) 07/ 01/2013 to 09/12/2013 , Online

**Text** : Thinking Mathematically , 5th edition, Blitzer, Prentice Hall (various isbn)

**MML** : My MathLab (subscription) is required for the online course (see below)

**Instructor** : Dr. Torrance L. Trevorrow

**Office Hours** : Online Mon - Thur: (optional live Saturday sessions may be offered)

**Email** : [ixxi@hushmail.com](mailto:ixxi@hushmail.com) or [torrance.trevorrow@adjunct.chaminade.edu](mailto:torrance.trevorrow@adjunct.chaminade.edu)

**Course Description** : (3 credits) (from the catalog) Mathematical thought is studied through interactions between the foundations of knowledge and the study of the nature of mathematics Topics include the basis of sets and logic, numbers and operations, algebra, geometry, measurement, financial management, probability and statistics, graphs and functions. 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.

**Course Topics** : Problem Solving, Inductive Deductive Reasoning, Scientific Method, Numeration Systems, Number Theory, Algebraic Expressions, Graphing Equations, Percents, Finance, Measurements, Optimization, Probability Theory, Statistics.

**Course Objectives** are based on the Chapter/Section Contents from the text and evaluated based on problem solving, definitions, concepts and applications. In Brief:

- Comprehend different problems solving models as they apply to mathematics
- Relate the scientific method to inductive reasoning and its limitations
- Application of tables and patterns to solving complex problems
- Explore different numeration systems and quantitative symbolic history
- Appreciate numerical properties and their applications
- Uniqueness of prime numbers in solving unusual problems
- Use of algebraic symbols to solve word problems
- Nature of functions, expressions, evaluations, vertical line test
- How to read, interpret, label and create graphs based on data or simple equations
- Apply concepts of percents, simple and compound interest to consumer applications
- Properly define commonly used nomenclature for financial formulae, ordinary vs exact interest
- Tax system; credits vs deduction, graduated vs flat, calculations
- Appreciate the origins, development and problems with our "money" system
- Be able to convert various measurement units, understand their advantages, disadvantages
- Dimensional Analysis, Optimize shape, Unit vs Measurement,
- Make predictions based on theoretical or empirical probability and apply to dice, cards, events
- Form basic statistical calculations, numerical and graphical interpretation
- Understand some requirements for valid survey, Sample Size, Randomness,
- Create different graph types, determine which might be most appropriate for given data`
- Know how graphs may be structured to modify perceptions and affect conclusions

**Required Materials** : Notebook, Text or online ebook, MML subscription, other materials as discussed.

**MML** : My Math Lab is a very widely used math based instruction and grading system, well integrated with the text offering a wide variety of questions, tutorials, step by step help, and videos. MML may be purchased as part of a new text, or separately online and includes an online version of the text.

Initial login and instructions will be via eCollege , all other coursework and email will be done via my math lab. Chaminade's computer fee is for services provided by Chaminade, MML for services provided by the publisher.

**Attendance** : Each week is the equivalent of 4 regular day classes. You are encouraged to check in daily for any new material, posts, updates etc, and have a personal dedicated math time each weekday. Letting classwork accumulate for the weekend is not recommended.

**Homework** : HW will be assigned and graded online via Matlab. This gives you the opportunity for multiple practice questions, instant help, and to demonstrate competency.

**Quizzes** : A comprehensive review quiz will be given Week 9 and must be completed once started.

**Late Work** : Only work properly submitted by the due date will count as part of the course grade. No exceptions.

**Grading** : (from the university catalog) Letter grades are given in all courses except those taken on a credit/no credit basis. Grades are calculated from the student's daily work, class participation, quizzes, tests, term papers, reports, and the final examination. They are interpreted as follows:

- A Outstanding scholarship and an unusual degree of intellectual initiative. 1800 pts +
- B Superior work done in a consistent and intellectual manner. 1600 pts +
- C Average grade indicating a competent grasp of subject matter. 1400 pts +
- D Inferior work of the lowest passing grade. 1200 pts +
- F Failed to grasp the minimum subject matter; no credit given. Less than 1200 pts.

Homework	(weeks 1 - 8, online)	800 pts
Master Quiz	(week 9, taken online single sitting)	200 pts
Final	(end of week 10, proctored)	1000 pts

**Final Exam** : 2 hrs, comprehensive, proctored, end of Week 10 . The final must be taken when scheduled. Reserve a seat via eCollege (Week 8) or contract the AEOP Office (Week 8) to arrange for a proctor. A score of 50% or better is required on the final to pass the course.

**Course Schedule** : In general we will cover 2 - 4 text sections per week. Each section may require 1 - 3 hrs for reading and study and additional time for completing the HW. A detailed weekly schedule will be provided online.

**Academic Integrity** : All material submitted in fulfillment of course requirements must be done by the registered student. Copying, having someone else do your work or sharing exam information, constitutes plagiarism and may result in failure for the course.

**Technology** : As much as practicable students are encouraged not to use calculators, however they may be helpful in evaluating large exponents or in checking your work. A reliable computer and Internet connection is essential.

**ADA Accommodations** : Students with special needs that meet the requirements of the Americans with Disabilities Act (ADA) should inform the Chaminade Counseling Center by the end of Week 2 for a determination of possible accommodations. Contact: Dr. Yashuara, 808 - 735 - 4845

**Assistance** : Your instructor usually checks the web board 2 - 3 times per day, and officially Monday through Thursday. Please make your post/request by Thursday . Live sessions may be offered near Pearl Harbor by arrangement. Tutoring may also be available via Student Services at the main campus as well as online through MML.

#### **Technical Support**

For technical questions: contact the Chaminade eCollege helpdesk at: [helpdesk@chaminade.ecollege.com](mailto:helpdesk@chaminade.ecollege.com), or call toll free at: (866) 647-0654 or (808) 735-4855.

#### **eCollege Account Support**

Call 808-739-8327 or email [jnakason@chaminade.edu](mailto:jnakason@chaminade.edu).

AEOP Office: [dyoshi@chaminade.edu](mailto:dyoshi@chaminade.edu) (808) 735-4711

**Notes / Weekly Grade Record**