## Chaminade University – MA100 Nature of Mathematics - Online

**Course Dates**: 10/03/2011 – 12/16/2011

**Class Times**: Online (10 Weeks).

**Course Text**: Thinking Mathematically, 5th edition, Blitzer, Prentice Hall MML: My math lab is required for this course (see information below)

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

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

**Email**: <u>arithmetic.math@gmail.com</u> (place MA100 Online in subject line)

Course Description: MA 100 Survey of Mathematics (3credits) (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.

## **Primary Chapters and Topics**:

- [1] Problem Solving, models, estimation, graph elements, inductive deductive reasoning
- [2] **Set Theory,** Concepts, Subsets, Venn Diagrams, Operations
- [5] Number Theory, order of operations, exponents, scientific notation, applications
- [8] Financial Management, Percent, Taxes, Simple Interest, Credit Cards
- [9] Measurements, conversions, dimensions, errors, scales, limits
- [10] **Geometry**, Points, lines, angles, Polygons, Area, Volume, Optimization
- [11] Probability, fundamental counting principle, theoretical, empirical, expected value
- [12] **Statistics**, sampling, frequency distribution, graphs, central tendency, dispersion

**Success**: Most universities recommend 8-12 hours per week for study, homework, assignments and research, for a 3 credit course. Create the time to understand all definitions, concepts and examples. Research shows that learning is more efficient and effect with daily study rather than saving for the weekend.

**Required Materials**: Notebook, Text, Graph paper (print yourself), ruler, protractor.

**MML**: My math lab is a very widely used math based instruction and grading system, well integrated with the text. MML offers a wide variety of practice questions, tutorials, step by step help, and videos. It may be purchased as part of a new text, or separately online. Initial login and instructions will be via eCollege, all other coursework and emails will be done via my math lab.

**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. Saving math for the weekend is not recommended.

**Homework:** HW will be assigned and graded via Mathlab. This gives you the opportunity for multiple practice questions, instant help, and to demonstrate competency. A minimum score will be required from the homework in order to take the weekly quizzes.

**Quizzes:** Will be taken via MML (my math lab) and based on the homework, reading, class information and any supplemental exercises.

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**Late Work:** "late work" results in a percentage reduction and must be completed before the next due date.

**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.
- B Superior work done in a consistent and intellectual manner.
- C Average grade indicating a competent grasp of subject matter.
- D Inferior work of the lowest passing grade.
- F Failed to grasp the minimum subject matter; no credit given

Quizzes(weekly, except week 10)40%Final (end of week 10, proctored)60%Assignment (written, class presentation, optional)+10%

**Final Exam**: 2hrs, comprehensive, proctored, end of Week 10. If you are off-island then you should make arrangement with the AEOP office around week 8, for a proctor. A score of 60% or better is required on the final to pass the course.

**Course Schedule**: In general we will cover 2-3 sections per week, and for Week 10 a practice review Quiz. A weekly schedule will be provided in class.

**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. (no calculator will be required for the final exam). As an online course 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 officially checks the web board Monday through Thursday. If you need help before the weekend please make your post/request by Thursday. Live sessions may be offered near Pearl Harbor and at Schofield, by arrangement. Tutoring may also be available via Student Services.

## **Notes & Contacts**

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