## Chaminade University - MA100 Nature of Mathematics - Schofield

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

Class Times: Thursday, 5.30-9.40 PM (10 Weeks), Schofield Barracks Education Center

**Course Text**: Thinking Mathematically, 5th edition, Blitzer, Prentice Hall.

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

**Office Hours**: Before or after class, other times by arrangement.

**Email**: arithmetic.math@gmail.com (place MA100 Schofield in the subject line)

**Course Description**: MA 100 Survey of Mathematics (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.

## **Primary Chapters and Topics:**

- [1] Problem Solving, models, estimation, graph elements, reasoning types
- [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**: Math cannot be speed read, so please allow time for adequate study. Most universities recommend 8-12 hours per week for study, homework, assignments and research for a 3 credit course.

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

**Attendance**: Students are expected to attend all classes. Missing an evening class is the equivalent of missing 4 regular day classes. You are responsible for the material that was covered and should obtain missing notes, homework, assignments, and handouts from a classmate. Late arrivals are disruptive to everyone's learning and recorded as a partial absence.

## **Deficiency Report**

By the fourth week of instruction or the equivalent, deficiency reports are issued for students who are officially registered but not attending class or are not doing satisfactory work. A student who has received a deficiency report has the option of withdrawing from the course without grade penalty provided the withdrawal occurs within established deadlines. Four week grades shall be assigned to students.

**Withdrawals by Instructor** (from the university catalog) Students who miss two consecutive weeks of class (prior to the withdrawal deadline) may be withdrawn by the instructor. Withdrawals are only effective for tuition refunds when initiated by the student during the refund periods and in accordance with the appropriate refund schedule. The student must obtain written permission from the instructor to be re- enrolled in a class from which the student has been withdrawn.

**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

**Final Exam:** 2hrs, comprehensive, proctored, in class Week 10, must be taken when scheduled. 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 each week (details provided in class).

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

**Technology:** Calculators will normally not be used in class. All other electronics including cell phones are prohibited in class.

**Not Permitted:** Per the base commander: no food or drink, other than bottled water is permitted in the classroom. Cellphones or other technology should be switched off and stored. Disruptive behavior interferes with the learning of other students and you will be asked to leave.

**Courtesy:** Even quiet talking can be disruptive to the students in front of you. Please be considerate and limit conversations to breaks or group work. If you have a question ask the instructor, others will benefit.

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

**Assistance:** Your instructor is usually available before or after class, and at other times by arrangement. Tutoring may also be available via student services.

## **Notes & Contacts:**