

Instructor: Dr. Torrance L. Trevorrow (M.S. O.D.)

Office Hours: Email <mailto:Mathland@earthlink.net>

Text Book: The Nature of Mathematics, Ninth Edition by Karl Smith. Brooks/Cole Publishing Company, 1998. ISBN 0-534-336890-5

Class Times: A class schedule is provided. This is an accelerated 10-week program.

Course Description: This is an introductory course that meets the Track A general education requirement in mathematics. Topics have been selected to challenge and develop your thought processes and to help create a logical approach to problem solving. This course does not meet any prerequisites for any other math course. (3 credit hours)

It is my hope that you will be exposed to some of the beauty that lies within the realm of mathematical thinking and that you will discover some of the tools and thought process that can be helpful in your everyday life. Course contents and timetable may be adjusted.

Objectives: At the completion of this course the diligent student should have knowledge, terminology, nomenclature and the ability to solve problems relating to:

- Pascal's triangle
- Pattern Recognition
- Set Theory
- Logic, Truth Tables
- Numeration Systems
- Binary Applications
- Number Theory / Prime Numbers
- Trigonometry (Basic)
- Golden Rectangles / Tau
- Topology / Euler
- Interest (Apr, Simple, Add On)
- Probability / Expectation
- Descriptive Statistics

Methodology: Most of your learning will come from your personal effort in doing the class exercises, assignments, and reading. As an online course superior personal responsibility and time management skills is required. There are no shortcuts to 'getting through the course'. You must do ALL of the homework, assignments, and reading. Late work regardless of the reason is not graded. You are responsible for keeping track of your own work, progress and scores.

Grading:	Assignments, Homework	20%
	Mid-Term	20%
	Final Exam	60%

Assignments and Homework: Assignments will be posed on the web board and indicate when they are due, and whether they are to be emailed to the instructor or posted. Homework solutions (showing all working) should be completed each week and kept in a notebook. Email the instructor whenever you have difficulties by using MA100 in the subject line with the homework or assignment problem identified. Example: Subject: MA100 2.1 (pg231) Q23

Mid-Term: will consist of questions that you should have already been exposed to via homework and the assignments. You will return your worked solutions via email.

Final: This will be a comprehensive test of all course material including assignments. For those of you that are off-island *please make arrangements now for a proctor - contact Donna Yoshi (dyoshi@chaminade.edu) or (808) 735-4755*. The final exam date will be posted on the web board. There are no makeup exams except for well-documented medical or family emergencies.

Academic Honesty and Plagiarism: All material submitted in fulfillment of course requirements must be done by the registered student. Cut and paste research, copying or having someone else do your work, constitutes plagiarism and will result in a grade of zero for the assignment and possible failure for the course.

Assistance: If you need help ask for it; but try the question first! Often spending time with a section and then coming back to it later will help. Some sections of the text jump from one point to another - so if you don't follow what has happened, please ask.

Supplies: Either a three ring binder or loose leaf note system, calculator (with trig functions is helpful), protractor, pencil, eraser, graph paper (helpful), ruler (translucent). For experiments: dice, cards, scissors, string and family members or friends will be beneficial.

Requirements: Please participate by asking questions, discussing topics and helping other students with their questions. Your contributions and ways of approaching problems will help everyone. All emails must have the subject line properly labeled. Due to the high volume of Spam any 'unknown' email gets deleted unread. Questions that have already been addressed will not be re-answered so make sure that you read all posts. One of the first requirements of this course is that you email the instructor indicating you understand the course requirements.

The web board can quickly become a mess and confusing – please make sure that you post in the correct section. To maintain order incorrectly placed posts will be deleted and credit will not be given. If you need practice using the web board CUH has provided the following link. You may also wish to make an icon for direct access to the web board.



WebBoard Tutorial.url

Text Reading and Homework

Week	Topic	Reading	Home Work	# Questions
1	Problem Solving	1.1	11,13,15,17,19,21,22,25,27,28,37,39	12
	Reasoning	1.2	2,7,13,17,25,27,37,43,48,49,53	11
	Scientific Notation	1.3	9,11,16,21,27,31,33,37,45,48,50,53,55	13
	Sets	1.4	7,9,13,21,25,27,33,35,37,43,47,51	12
				(48)
2	Logic	2.1	7,13,20,23,31,33,37,49,59	9
	Truth Tables	2.2	5,7,11,13,41	5
				(14)
3	Numeration	3.1	9,11,15,21,29,31	6
	Systems	3.2	11,13,17,21,25,31,33,38,45,47,49,51	12
		3.3	7,9a,15,23,31,33	6
		3.4	5,7,9,11,13,19,21,26,27,39,41,43,45	13
	Calculating Devices	3.5	Read 1-5	(37)
4	(Date to be posted)		Mid Term	
5	Natural Numbers	4.1	21,23,25,1	4
	Prime	4.2	7,9,11,13,16,17,19,21,23,25,37,39,41	13
	Integer	4.3	7,18,21,24,35,49,51	7
	Rational	4.4	7,9,13,19	4
	Irrational	4.5	9,11,13,19,21,23,31,38,39,41,45	11
	Real	4.6	1,5,6,9,11,13,15,23,34,35,47	11
				(50)
6	Similar Triangles	6.4	1,3,5,29,31,39,41,45,49,52	10
	Trigonometry	6.5	1-4,11,13,15,17,19,29,31,39,41,49,51,56	16
	Golden Rectangles	6.6	1-5,7,9,11,13,14,22,27	12
	Euler	6.7	1-9,36,37	11
	Topology	6.8	1-3,9,11,13	6
				(55)
7	Interest	8.1	7,9,11,13,15,17,21,29,31,35,47,49,54	13
	Installment	8.2	1-3,7,9,11,13,21,27,29,31,41,43,47	14
				(27)
8	Probability	9.1	1-3,7,9,11,21,25,51,53,59	11
	Expectation	9.2	1-5,7,9,13,15,17,19,24,51,57	14
				(25)
9	Descriptive Statistics	10.2	3,13,15,17,19,23,25,37,41,43	10
				(10)
10	(Date to be posted)		Review	
*			FINALS SATURDAY 1.00 pm	266/30