CHAMINADE UNIVERSITY
MATH-110-03-1: PRE-CALCULUS
COURSE SYLLABUS – FALL 2015

Instructor: Matthew Cochran
Email Address: matthew.cochran@chaminade.edu
Office: Henry Hall room 7
Office Phone: 739-8361
Course Time: Monday, Wednesday, and Friday from 10:30 to 11:20
Course Room: Henry Hall 203
Prerequisites: MA 103 or placement
Required Text: Sullivan and Sullivan, *Precalculus: Concepts Through Functions, A Right Triangle Approach to Trigonometry (2nd Edition) Custom Edition for Chaminade University*, Pearson, New York, 2011.
ISBN-10: 1-269-37602-0, ISBN-13: 978-1-269-37602-0
Other Materials: Scientific Calculator

COURSE DESCRIPTION:
Foundation for further study in mathematics. Primarily the preparatory course for Calculus I. Topics include functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions and their inverses, and some other selected topics.

EVALUATIONS AND GRADING SCALE:

Exam 1 . . . . . 20%
Exam 2 . . . . . 20%
Exam 3 . . . . . 20%
Exam 4 . . . . . 20%
Quizzes and Homework 20%

90% – 100% . . . . . A
80% – 90% . . . . . B
70% – 80% C
60% – 70% . . . . . D
0% – 60% . . . . . F

Incomplete grades (I) will be given in accordance with college regulations as outlined in the college catalog. Withdrawals (W) from the class are the responsibility of the student and deadlines are set by the college.

EXAMS:
There will be four examinations as part of the requirements for the course. The exams will be, by necessity, cumulative. Mathematics is sequential and its concepts must be learned in order. Material for exams will be drawn primarily from homework problems. Hence, the best way to review for an exam is to review homework assignments.

Make-up exams will only be given under extenuating circumstances beyond the student's control. Persons missing an exam due to illness or injury must present a doctor's certificate. Make-up exams must be completed within one week of the scheduled exam date or on the day the student returns to school (whichever comes first). Scheduling is the responsibility of the student.

QUIZZES:
A ten minute quiz will be given during many classes. Material for the quizzes will be drawn from recent homework assignments. Hence, the best way to prepare for quizzes is to do homework. Quizzes may be given at the beginning of class, so show up on time. Make-up quizzes are not given.

HOMEWORK:
To be successful in this course, it is essential that you complete all homework assignments. Be prepared to spend three hours or more on homework every week. If you are having trouble, get help from the instructor or your classmates. Do not fall behind. Homework is due at the beginning of class. Late homework is not accepted.

ATTENDENCE:
Regular attendance is expected of all students. Read material prior to lecture. If a topic is still not clear after it has been discussed in class, ask questions. Time will be spent working through homework problems and reviewing for exams in addition to lecturing. You will work with partners in class. It is important that partners engage in discussion of their work and avoid working as isolated individuals.

COURSE OBJECTIVE:
To prepare students for Calculus by developing skills in algebra, analytic geometry, and trigonometry.

MUSIC DEVICES AND CELLPHONES:
Unless specifically permitted by your instructor, use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class.

ADA ACCOMODATIONS:
Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations. Please refer any questions to the Dean of Students and review procedures at:

www.chaminade.edu/student_life/sss/counseling_services.php

TENTATIVE WEEKLY SCHEDULE:

Week	Date	L#	Topic	Reading
	Aug 24	1	Intro; Distance and midpoint	P.1
1	Aug 26	2	Graphs	P.2
	Aug 28	3	Lines	P.3
	Aug 31	4	More lines	
2	Sep 02	5	Circles	P.4
	Sep 04	6	Functions	1.1
	Sep 07	**H1**	**Labor Day – No Class**	
3	Sep 09	7	Graph of a function	1.2
	Sep 11	8	Properties of functions	1.3
	Sep 14	9	More properties of functions	
4	Sep 16	10	Library of functions	1.4
	Sep 18	11	Graphing functions	1.5
	Sep 21	**E1**	**EXAM 1 – Chapters P & 1**	
5	Sep 23	12	Linear models	2.1 & 2.2
	Sep 25	13	Quadratic functions	2.3
	Sep 28	14	Properties of quadratic functions	2.4
6	Sep 30	15	Quadratic modeling	2.6
	Oct 02	16	Polynomials	3.1
	Oct 05	17	Rational functions	3.2
7	Oct 07	18	Graphing rational function	3.3
	Oct 09	19	Zeros of a polynomial function	3.5
	Oct 12	**H2**	**Discoverers' Day – No Class**	
8	Oct 14	**E2**	**EXAM 2 – Chapters 2 & 3**	
	Oct 16	20	Composite functions	4.1
	Oct 19	21	Inverse functions	4.2
9	Oct 21	22	Exponential functions	4.3
	Oct 23	23	Logarithmic functions	4.4 & 4.5
	Oct 26	24	Angles; Right triangle trigonometry	5.1 & 5.2
10	Oct 28	25	Values of trigonometric functions	5.3
	Oct 30	26	More values of trigonometric functions	5.4
	Nov 02	27	The unit circle	5.5
11	Nov 04	28	Graphs of Sine and Cosine	5.6
	Nov 06	29	Phase shifts	5.8
	Nov 09	**E3**	**EXAM 3 – Chapters 4 & 5**	
12	Nov 11	**H3**	**Veteran's Day – No Class**	
	Nov 13	30	Inverse Sine, Cosine, and Tangent	6.1
	Nov 16	31	More inverse practice	6.2
13	Nov 18	32	Trigonometric equations	6.3
	Nov 20	33	Trigonometric identities	6.4 & 6.5
	Nov 23	34	More trigonometric identities	6.6 & 6.7
14	Nov 25	35	Right triangle applications	7.1
	Nov 27	**H4**	**Thanksgiving – No Class**	
	Nov 30	36	Law of Sines and Cosines	7.2 & 7.3
15	Dec 02	37	Area of a triangle	7.4
	Dec 04	38	Review	
finals	Dec 10	**FE**	**11:00 to 1:00 – EXAM 4 – Chapters 6 & 7**	