CHAMINADE UNIVERSITY
MA-110-03-1: PRE-CALCULUS
COURSE SYLLABUS – FALL 2016

Instructor: Matthew Cochran
Email Address: matthew.cochran@chaminade.edu
Office: Henry Hall Office 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: College Algebra 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:
This course provides a foundation for further study in mathematics and prepares 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 most 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.

ATTENDANCE:
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 MOBILE PHONES:
Unless specifically permitted by your instructor, use of music devices and mobile 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

WEEKLY SCHEDULE:

Week	Date	L#	Topic	Reading
	Aug 22	1	Course intro; Distance and midpoint	P.1
1	Aug 24	2	Graphs	P.2
	Aug 26	3	Lines	P.3
	Aug 29	4	More lines	
2	Aug 31	5	Circles	P.4
	Sep 02	6	Functions	1.1
	Sep 05	**H1**	**Labor Day – no class**	
3	Sep 07	7	Graph of a function	1.2
	Sep 09	8	Properties of functions	1.3
	Sep 12	9	More properties of functions	
4	Sep 14	10	Library of functions	1.4
	Sep 16	11	Graphing functions	1.5
	Sep 19	12	Review	
5	Sep 21	**E1**	**EXAM 1 – Chapters P & 1**	
	Sep 23	13	Linear models	2.1 & 2.2
	Sep 26	14	Quadratic functions	2.3
6	Sep 28	15	Properties of quadratic functions	2.4
	Sep 30	16	Quadratic modeling	2.6
	Oct 03	17	Polynomials	3.1
7	Oct 05	18	Rational functions	3.2
	Oct 07	19	Graphing rational function	3.3
	Oct 10	**H2**	**Discoverers' Day – no class**	
8	Oct 12	20	Zeros of a polynomial function	3.5
	Oct 14	21	Review	
	Oct 17	**E2**	**EXAM 2 – Chapters 2 & 3**	
9	Oct 19	22	Composite functions	4.1
	Oct 21	23	Inverse functions	4.2
	Oct 24	24	Exponential functions	4.3
10	Oct 26	25	Logarithmic functions	4.4 & 4.5
	Oct 28	26	Angles; Right triangle trigonometry	5.1 & 5.2
	Oct 31	27	Values of trigonometric functions	5.3
11	Nov 02	28	More values of trigonometric functions	5.4
	Nov 04	29	The unit circle	5.5
	Nov 07	30	Graphs of Sine and Cosine	5.6
12	Nov 09	31	Phase shifts	5.8
	Nov 11	**H3**	**Veterans' Day – no class**	
	Nov 14	32	Review	
13	Nov 16	**E3**	**EXAM 3 – Chapters 4 & 5**	
	Nov 18	33	Inverse Sine, Cosine, and Tangent	6.1
	Nov 21	34	More inverse practice	6.2
14	Nov 23	35	Trigonometric equations	6.3
	Nov 25	**H4**	**Thanksgiving Recess – no class**	
	Nov 28	36	Trigonometric identities	6.4 & 6.5
15	Nov 30	37	More trigonometric identities	6.6 & 6.7
	Dec 02	38	Review	
Finals	Dec 08	**FE**	**CUMULATIVE FINAL – 11:00 to 1:00**	