CHAMINADE UNIVERSITY
MATH-210-01-1: CALCULUS I
COURSE SYLLABUS – FALL 2012

Instructor:	Matthew Cochran
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Office:	Henry Hall 7
Office Phone:	739-8361
Course Time:	Tuesday and Thursday from 8:30 to 11:20 and Tuesday from 1:00 to 1:50
Course Room:	Henry 203 and Henry 107
Prerequisites:	MATH-110: Pre-Calculus or placement test
Required Text:	Larson and Edwards, *Calculus of a Single Variable,* 9th ed., Brooks/Cole, Belmont CA, 2010.
Other Materials:	Graphing calculator

COURSE DESCRIPTION:
This is the first part of a three-semester sequence of differential and integral calculus. Major topics include limits and continuity, differentiation and integration of algebraic and trigonometric functions, and basic applications.

EVALUATIONS AND GRADING SCALE:

Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Final	20%
Quizzes	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 and a final as part of the requirements for the course. Material for exams will be drawn primarily from quizzes and homework assignments. Hence, the best way to review for an exam is to review previous quizzes and 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.

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.

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.

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 OBJECTIVES:
By taking this course, students will:
1. Gain understanding of the concept of limits.
2. Gain understanding of the continuity of functions.
3. Gain understanding of the concept of the derivative and its relation to the behavior of a function.
4. Develop skills to compute derivatives, and demonstrate a comprehension of general rules for differentiation.
5. Develop skills to use derivatives in critical point analysis, graph sketching, and optimization problems.
6. Gain understanding of the concepts of indefinite and definite integration and the Fundamental Theorem of Calculus.
7. Develop skills to calculate integrals using the substitution method when appropriate.
8. Develop skills to solve applied problems using integrals.

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	Due
1	Aug 28	1	Course Intro; Review; **Q1**		
	Aug 30	2	Preview of calculus	1.1	
2	Sep 04	3	Finding limits graphically, numerically, and analytically; **Q2**	1.2 & 1.3	**HW1**
	Sep 06	4	Continuity and infinite limits	1.4 & 1.5	
3	Sep 11	5	Review; **Q3**		**HW2**
	Sep 13	**E1**	**EXAM 1 – Chapter 1**		
4	Sep 18	6	Derivative and slope	2.1	
	Sep 20	7	Basic differentiation rules	2.2	
5	Sep 25	8	Product and quotient rules; **Q4**	2.3	**HW3**
	Sep 27	9	Chain rule	2.4	
6	Oct 02	10	Implicit differentiation; **Q5**	2.5	**HW4**
	Oct 04	11	Related rates	2.6	
7	Oct 09	12	Review; **Q6**		**HW5**
	Oct 11	**E2**	**EXAM 2 – Chapter 2**		
8	Oct 16	13	Extrema	3.1	
	Oct 18	14	First derivative test	3.3	
9	Oct 23	15	Second derivative test and limits at infinity; **Q7**	3.4 & 3.5	**HW6**
	Oct 25	16	Curve sketching	3.6	
10	Oct 30	17	Optimization problems; **Q8**	3.7	**HW7**
	Nov 01	18	Newton's Method	3.8	
11	Nov 06	19	Review; **Q9**		**HW8**
	Nov 08	**E3**	**EXAM 3 – Chapter 3**		
12	Nov 13	20	Antiderivatives	4.1 & 4.2	
	Nov 15	21	Area	4.2	
13	Nov 20	22	The fundamental theorem of calculus; **Q10**	4.3 & 4.4	**HW9**
	Nov 22	**H1**	**Thanksgiving – no class**		
14	Nov 27	23	Review; **Q11**	4.5	**HW10**
	Nov 29	**E4**	**EXAM 4 – Chapter 4**		
15	Dec 04	24	Numerical integration	4.6	
	Dec 06	25	Review for final		
finals	Dec 11	**FE**	**CUMULATIVE FINAL – 8:30 to 10:30**		