CHAMINADE UNIVERSITY
MATH-211: CALCULUS II
COURSE SYLLABUS – SPRING 2015

Instructor: Matthew Cochran
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Office: Henry Hall 7
Office Phone: 739-8361
Course Time: Tuesdays and Thursdays from 8:30 to 9:50
and Wednedays from 1:30 to 2:20
Course Room: Ching 251 or Eiben 202
Prerequisites: MATH-210: Calculus I or placement test
Required Text: Larson and Edwards**,** *Calculus of a Single Variable***,** 10th ed., Brooks/Cole, Belmont CA, 2013. ISBN-13: 978-1285060286 ISBN-10: 1285060288
Other Materials: Graphing calculator

COURSE DESCRIPTION:
This is the second part of a three-semester sequence on differential and integral calculus. Major topics include techniques of differentiation and integration of transcendental functions, differential equations, applications of integration, advanced techniques of integration, and infinite series.

EVALUATIONS AND GRADING SCALE:

Exam 1 . . . . . 20%
Exam 2 . . . . . 20%
Exam 3 . . . . . 20%
Final 20%
Quizes 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 three exams 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 quiz will be given most weeks. 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:
At the completion of this course students should be able to:

1. Differentiate and integrate exponential, logarithmic, trigonometric, inverse trigonometric and hyperbolic functions.
2. Solve differential equations.
3. Find area, volume, arch length, and surface areas. Find work, moments, centers of mass, and centroids.
4. Evaluate integrals by the methods of integration by parts, trigonometric substitution, and partial fractions. Find limits by applying L'Hopital's rule. Evaluate improper integrals.
5. Find the sum of a series. Express repeating decimal as the ratio of two integers. Determine the convergence or divergence of infinite series. Represent functions by power series. Find Taylor or Maclaurin Series for a function.

MUSIC DEVICES AND CELLPHONES:
Unless specifically permitted by your instructor, use of music devices or 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#	Lecture Topic	Reading
1	Jan 13	1	Intro; Differentiation of natural log	5.1
	Jan 15	2	Integration of natural log	5.2
2	Jan 20	3	Inverse functions	5.3
	Jan 22	4	Exponential functions	5.4
3	Jan 27	5	Other bases	5.5
	Jan 29	6	Inverse trig functions	5.6
4	Feb 03	7	Inverse trig functions	5.7
	Feb 05	8	Hyperbolic functions	5.8
5	Feb 10	9	Review	
	Feb 12	**E1**	**EXAM 1 – Chapter 5**	
6	Feb 17	10	Area	7.1
	Feb 19	11	Area	7.1
7	Feb 24	12	Volume: Disk method	7.2
	Feb 26	13	Arc Length	7.4
8	Mar 03	14	Work	7.5
	Mar 05	15	Pressure	7.7
9	Mar 10	16	Review	
	Mar 12	**E2**	**EXAM 2 – Chapter 7**	
10	Mar 17	17	Integration rules	8.1
	Mar 19	18	Integration by parts	8.2
–	Mar 24 Mar 26	**H2**	**Spring Break**	
11	Mar 31	19	Trig integrals	8.3
	Apr 02	20	Trig substitution	8.4
12	Apr 07	21	Partial fractions	8.5
	Apr 09	22	Integration tables	8.6
13	Apr 14	23	L'Hopital's Rule	8.7
	Apr 16	24	Improper integrals	8.8
14	Apr 21	25	Review	
	Apr 23	**E3**	**EXAM 3 – Chapter 8**	
15	Apr 28	26	Slope fields	6.1
	Apr 30	27	Growth and decay	6.2
Tues	May 05	**FE**	**FINAL EXAM – 8:30 to 10:30 – Cumulative**	