MA-211 CALCULUS II (4)
Chaminade University, Summer II 2018 7/2 – 8/10/2018
MA 211-01: Mon, Wed, Thurs 830 – 1050AM, & Thurs 1100AM - 120PM, HENR 102
Instructor: Dr. Jerelyn Watanabe
Email: jerelynwatanabe@chaminade.edu
Office: TBD
Office Hours: Tuesday and Friday, By appointment

Mathematics Program Course Description

Continuation of MA 210. Differentiation and integration of transcendental functions including exponential, logarithmic, and inverse trigonometric functions, and more techniques of integration make up the first part of the course. The second part covers topics in sequences and series, limits of sequences, L'Hopital's rule, convergence and divergence of series, Taylor series, and general discussion of power series.

Prerequisites

Calculus I (MA-210) or placement.

Required Text

Calculus of a single variable, Larson & Edwards, 10th ed. ISBN: 9781285060286

Content Learning Outcomes

By taking this course, the student will:
(1) gain understanding of more transcendental functions including their differentiation and integration;
(2) develop advanced skills in integration and L'Hopital's rule;
(3) develop skills to solve applied problems using integration;
(4) gain understanding of the concepts of sequences and series;
(5) develop skills to test the convergence of series and represent functions by power series;
(6) acquire basic knowledge of slope fields and differential equations that apply to growth and decay models.

Core Curriculum Learning Outcomes for Mathematics

(1) Demonstrate an understanding of basic mathematical principles needed to function effectively in our world.
(2) Demonstrate an understanding of basic symbolic reasoning that can be used to describe relationships and patterns found in nature.
(3) Demonstrate an understanding of the mathematical tools necessary for success in your selected major.

Advice for success

Engage with math every day, especially when we don't have class. I encourage you to form a study group.

Communicate with me – ask questions, share your understandings and frustrations, let me know what's going on in your life.

We are in this together – 6 weeks of intensive Calculus! I would like to know if there is anything that I can do to help you learn.

Class will be held in a seminar style. You will be expected to read and engage with the content before you come to each class. We will discuss concepts and I will share solved problems. The majority of our class time will be spent solving problems on the problem sets. Since our classes are long, we will take breaks for water, snacks, etc. as needed. Bring home lunch on our lab day.

Tentative Schedule (M = Monday, W = Wednesday, R = Thursday)

Week#.Class#	Date	Read before class	Topic
1.1	M July 2	5.1	Introductions & Natural Log Differentiation
Holiday	W July 4		
1.2	R July 6	5.2	Natural Log Integration
1.3	R Lab July 6	5.3	Inverse Functions
2.4	M July 9	5.4 & 5.5	Exponential Functions & Other Bases
2.5	W July 11	5.6 & 5.7	Inverse Trig Functions Differentiation & Integration
2.6	R July 12	Exam 1	Ch 5 – Transcendental Functions
2.7	R Lab July 12	7.1	Integration - Area
3.8	M July 16	7.2	Integration – Volume by Disk
3.9	W July 18	7.3	Integration – Volume by Shell
3.10	R July 19	7.5	Integration – Work
3.11	R Lab July 19	8.1	Integration Rules
4.12	M July 23	8.2	Integration by Parts
4.13	W July 25	8.3	Trig Integrals
4.14	R July 26	8.4	Trig Substitution
4.15	R Lab July 26	8.5	Partial Fractions
5.16	M July 30	8.7	L'Hopital's Rule
5.17	W Aug 1	Exam 2	Ch 7&8 – Integration
5.18	R Aug 2	9.1	Sequences
5.19	R Lab Aug 2	9.2	Series & Convergence
6.20	M Aug 6	9.8 & 9.10	Power & Taylor Series
6.21	W Aug 8	6.1	Slope Fields
6.22	R Aug 9	6.2	Growth and Decay
6.23	R Lab Aug 9	Final Exam	Comprehensive

Problem Sets

Completing problem sets is required for your success in this class and will be the primary method for you to communicate your understanding of the concepts to me. Expect to be challenged and feel uncomfortable as you gain understanding.

All problem sets must be completed. Let me know as soon as you think that you may need more time to complete a problem set. I will ask you to submit a partially completed assignment (this will happen in class) and then we will make arrangements for submitting the completed problem set. A penalty may be applied if prior arrangements are not made for late submission.

You may use a scientific or graphing calculator on problem sets.

Exams

Exams will consist of several written problems based on the homework problem sets.

You may use a scientific or graphing calculator on problem sets.

Grading

Problem Sets:	40%
Exam 1:	20%
Exam 2:	20%
Final Exam:	20%

A:	90 – 100%
B:	80 – 89%
C:	70 – 79%
D:	60 – 69%
F:	below 60%

Policies of note from the 2017-2018 Undergraduate Catalog

ACADEMIC HONESTY: Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an “F” grade for the work in question, an “F” grade for the course, suspension, or dismissal from the University.

ATTENDANCE: Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor’s Chaminade email address, calling the instructor’s campus extension, or by leaving a message with the instructor’s division office. It is the instructor’s prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade.

Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor’s discretion.

CLASSROOM POLICIES: While each instructor has their own policies regarding classroom conduct and requirements, the following University policies apply to all classes:

- Smoking and alcoholic beverages are prohibited in all classrooms, whether or not class is in session.
- No pets are allowed in class. Exceptions will be made in the case of a seeing-eye dog.
- Radio, CD players, headsets, televisions, and other personal audiovisual equipment not pertinent to the class are prohibited during class.
- Cellular telephone use is also prohibited during class except in extenuating circumstances approved in advance by the professor.
- The use of any camera or video devices while in class, restrooms, locker rooms, or in any situation not normally considered public or where users of the facility may reasonably expect privacy is prohibited. Such devices shall include but are not limited to those in mobile telephones, computers, electronic organizers, or other more surreptitious equipment, and which are capable of capturing either still or moving image.

• A dress code requiring footwear and appropriate attire, to be worn in classrooms, as well as in the library, cafeteria and administrative offices. No beachwear is allowed. Laboratories have additional requirements.

Please note that it is the instructor's sole prerogative to determine whether a student is:

• In a fit condition to perform classroom work (e.g., is not under the influence of alcohol or drugs, and is not sleeping).
• Working on assignments for that particular class (rather than working on projects for other classes or engaging in activity unrelated to school work).
• Distracting other students as to impair the learning environment.

If the instructor finds a student in violation of any of these provisions, or the policies outlined in the course syllabus, he or she may require the student to leave the classroom and may subsequently mark the student absent, which could eventually affect the student's final grade. Failure on the part of the student to honor the instructor's request to leave the classroom may result in removal of the student by the University security personnel and initiation of the University disciplinary process.

ADA Policy from the 2017-2018 Student Handbook

studentaffairs.chaminade.edu/counseling-center/counseling-services/
Counseling Center, Student Support Services Building (808) 735-4845

Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on the basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at (808) 735-4845 for further information.