MATH 242 — CALCULUS II

Instructor: Kenny Corea kcorea@hawaii.edu

Office Hours: MW 1:30-2:30, TR 12-1 Keller 402E

Lectures: TR 10:30-11:45 Kuykendall Hall 301

Recitation:

Section Recitation Time Location 7 F 8:30-9:20 Keller 301

8 F 9:30-10:20 Kuykendall Hall 305

Course description: Integration techniques and applications, series and approximations, differential equations.

Book: Calculus, 8th Edition, by Stewart.

Prerequisites: A grade of C or better in Math 241 or Math 251A, or a grade of B or better in Math 215.

Course management: All course announcements, homework assignments, solutions to quizzes/worksheets, etc. will be available on our course webpage:

https://math.hawaii.edu/~kcorea/courses/spring_2023/242/

It is your responsibility to keep up with the information on our webpage.

Calculators: No.

Grades: Your grade is broken down as follows:

Homework 10% Worksheets 10% Quizzes 10%

Exams 45% (3x15%)

Final 25%

The standard grade scale will be used.

Homework: Written homework will be assigned weekly, and due at the beginning of each week during lecture. All assignments will be weighed equally.

Recitations You will meet weekly with your TA for a discussion hour. At the beginning of each recitation you will take a 10 minute quiz. Each quiz will cover the material from the previous week; doing ALL your homework and reviewing the worksheet solutions from the previous week are good ways to prepare for a quiz. Following that you will work on a worksheet that is due at the end of the period. All quizzes and worksheets are weighed equally.

Exams: Attendance is compulsory. There will be four exams, three midterm exams and a common final. Each exam covers the most recent material, and the final is cumulative.

Exam 1 Thursday 2/9 Lecture room and time Exam 2 Thursday 3/9 Lecture room and time Exam 3 Thursday 4/13 Lecture room and time Final Wednesday 5/10 12-2

The location of the final is TBD.

Make-up Policy: In general, quizzes, exams, and assignments will not be excused. Late homework will not be accepted as you have ample time to complete each assignment. If you know you will miss an exam in advance, we can schedule you to take it earlier; these must excuses must be given to me at the beginning of the semester. The following policy is how we will handle unforseeable circumstances.

Your lowest two quiz, worksheet, and homework scores will be dropped. Your lowest midterm score will be replaced by your final score if it improves your overall grade.

Academic integrity: Cheating, plagiarism, and academic dishonesty will not be tolerated. Your are highly encouraged to work together on your homework, however the work you submit must be your own.

KOKUA: I am happy to work with you and the KOKUA Program (Office for Students with Disabilities), if you need course accommodations. For more information visit their webpage https://hawaii.edu/kokua/.

Tentative Schedule: We will cover chapters 6, 7, 9, and 11 of the Stewart text. The following is a rough timeline of what we are covering each week.

Week	Topic
1	Inverse Functions, the Natural Logarithm
2	Exponentials and Logarithms
3	Exponential Growth, Inverse Trig
4	L'Hôpital's Rule, Integration by Parts
5	Trig. Integrals, Exam 1
6	Trig. Sub., Partial Fractions
7	Approximate Integration
8	Improper Integrals
9	Sequences, Exam 2
10	Spring Break
11	Series, Integral Test
12	Comparison Test, Alternating Series
13	Ratio and Root Test, Power Series, Good Friday
14	Representations, Exam 3
15	Taylor series
16	Slope Fields, Euler's Method
17	Separable and First-order Linear Equations
18	Finals week