MAT 193 Calculus II, Section 01, CN 25709 Spring 2023

Class meets MWF 2:30 PM - 3:55 PM in LCH A219.

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office hours: Monday, Wednesday: 12:00 - 1:20 PM, Friday: 11:30 AM - 12:00 PM, 1:30 - 2:20 PM, or by appointment.

Course Description: MAT 193, Calculus II, covers Chapters 1-3 from the textbook: techniques and applications of integration, sequences and series, power series, Taylor series.

Text: CLP-2 Integral Calculus, by Joel Feldman, Andrew Rechnitzer, Elyse Yeager, available online at http://www.math.ubc.ca/~CLP/

Objectives: After completing MAT 193 the student should be able to:
- Use more advanced techniques of integration such as integration by parts or integration by trigonometric substitution to evaluate common integrals without the use of tables.
- Apply theory of integration in finding volumes of solids, work, centers of gravity and average values of functions.
- Attain good working skills, with the aid of graphing calculators, in obtaining approximate values of definite integrals.
- Test for convergence or divergence of sequence and series, find interval of convergence for power series and represent functions as Taylor series.

Prerequisites: MAT 191 or equivalent with a grade of "C" or better.

Grades: Grades will be based on **three full period written examinations** (60% total), a comprehensive **final examination** (25%), and **quizzes**, **homework** and (possibly) other assignments (15%) for the remainder.
The exact grading system for your section is the following:

No makeup examinations will be given. The exams are taken in class and graded on Gradescope. If you must miss an examination for a legitimate reason, discuss this, in advance, with me, and I may then substitute the relevant score from your final examination for the missing grade. Each of the **three exams** will be graded on a 0-20 scale, then the sum of the scores is denoted by E.

Homework will be due every week, the day before quiz days, and each homework is worth 10 points. Each week one of the problems from the homework due for that week will be selected and graded on a scale from 0 to 4. The remaining 6 points will be awarded for completeness of the homework assignment. Submitting solutions copied from the back of the book will bring little or no credit, since copying solutions will not prepare you for answering questions during the oral examinations. The average of all homework scores is denoted by H. Homework will be submitted as a pdf with your paper work on Gradescope. There is no need to match the pages with the problems when submitting the homework, see
https://www.youtube.com/watch?v=u-pK4GzpId0
Gradescope can be accessed from the link your Canvas course, and you can practice submitting your work on Gradescope using the assignment called Submission practice, which will remain open throughout the semester.
You might be asked to explain your work on a submitted problem. Failure to provide an explanation might result in a score of zero for the entire homework assignment. No late homework will be accepted.

15 minutes quizzes will be given every week, and will be graded on a scale from 1 to 5. The average of the quizzes scores is denoted by Q. Each quiz will consist of one problem, similar but not necessarily identical to one of the homework problems assigned for that week. The quiz will be taken in class and graded on Gradescope. No makeup quizzes will be offered.

The **final exam, will contain problems similar to problems assigned as homework throughout the semester,** will be graded out of a maximum possible 25 points, then the score is denoted by F. The final exam will be taken in class and graded on Gradescope.

Extra credit opportunities will be announced in class.

To determine your **final grade**, compute E+H+Q+F. The maximum is 100, and the grade will be given by the rule:

A: 93-100; A-: 90-92; B+: 87-89; B: 83-86; B-: 80-82
C+: 77-79; C: 73-76; C-: 70-72; D+: 67-69; D: 60-66; F: Less than 60.

You will be able to follow your progress in the class in Canvas under Grades throughout the semester.

Accommodations for Students with Disabilities: California State University, Dominguez Hills adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with temporary and permanent disabilities. If you have a disability that may adversely affect your work in this class, I encourage you to register with Student disAbility Resource Center (SdRC) and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. Please note: no accommodation may be made until you register with the SdRC in WH D-180. For information call (310) 243-3660 or to use telecommunications Device for the Deaf, call (310) 243-2028.

Academic Integrity: The mathematics department does not tolerate cheating. Students who have questions or concerns about academic integrity should ask their professors or the counselors in the Student Development Office, or refer to the University Catalog for more information. (Look in the index under "academic integrity".)

Tentative schedule and homework assignments

M 1/23:   1.7 Integration by parts: 1,3,5,7,9,11,13,15,17,19,21,23
W 1/25:   1.7 Integration by parts: 2,4,6,8,10,12,14,16,18,20,22
F 1/27:   1.8 Trigonometric Integrals: 1,3,5,7,9,11,13,15,17,19,21,25,27,29
M 1/30:   1.8 Trigonometric Integrals: 2,4,6,8,10,12,14,16,18,20,22,24,26,28
W 2/1:   1.9 Trigonometric Substitution: 1,3,5,7,9,11,13,15,17,19,21
F 2/3:   1.9 Trigonometric Substitution: 2,4,6,8,10,12,14,16,18,20,22
M 2/6:   1.10 Partial Fractions**:** 1,3,5,7,9,11,13,15,17,9,21,23
W 2/8:   1.10 Partial Fractions: 2,4,6,8,10,12,14,16,18,20,22,24
F 2/10:   1.12 Improper Integrals: 1,2,3,6,9,11
M 2/13:   1.13 More Integration Examples: 1,3,5,7,9,11,13,15,17,19,21
W 2/15:   1.13 More Integration Examples: 2,4,6,8,10,12,14,16,18,20,22
F 2/17:   **Review**
M 2/20:   **Presidents' Day Holiday**
W 2/22:   **Exam 1**
F 2/24:   1.5 Areas between Curves: 1,3,5,7,9,11,13,15,17
M 2/27:   1.5 Areas between Curves: 2,4,6,8,10,12,14,16,18
W 3/1:   1.6 Volumes: 1,3,5,7,9,11,13,15,17,19,21
F 3/3:   1.6 Volumes: 2,4,6,8,10,12,14,16,18,20,22
M 3/6:   2.1 Work: 1,3,5,7,9,11,13,15,17,19
W 3/8:   2.1 Work: 2,4,6,8,10,12,14,16,18
F 3/10:   2.2 Averages: 1,3,5,7,9,11,13,15,17,19
M 3/13:   2.3 Center of Mass and Torque: 1,3,5,7,9,11,13,15,17
W 3/15:   2.3 Center of Mass and Torque: 2,4,6,8,10,12,14,16,18
F 3/17:   2.4 Separable Differential Equations: 1,3,5,7,9,11,13,15,17,19,21
M 3/20:   2.4 Separable Differential Equations: 2,4,6,8,10,12,14,16,18,20,22
W 3/22:   **Review**
F 3/24:   **Exam 2**
M 3/27:   **Spring Recess**
M 3/29:   **Spring Recess**
M 3/31:   **Spring Recess**
M 4/3:   1.11 Numerical Integration 1,3,5,9,11
W 4/5:   3.1 Sequences: 1,3,5,7,9,11,13,15,17,19
F 4/7:   3.1 Sequences: 2,4,6,8,10,12,14,16,18,20
M 4/10:   3.2 Series: 1,3,5,7,9,11,13,15,17,19,21,23
W 4/12:   3.2 Series: 2,4,6,8,10,12,14,16,18,20,22,24
F 4/14:   3.3 Convergence Tests: 1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33
M 4/17:   3.3 Convergence Tests: 2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32
W 4/19:   3.4 Absolute and Conditional Convergence: 1,3,5,7,9,11,13,15
F 4/21:   3.4 Absolute and Conditional Convergence: 2,4,6,8,10,12,14
M 4/24:   3.5 Power Series: 1,3,5,7,9,11,13,15,17,19,21
W 4/26:   3.5 Power Series: 2,4,6,8,10,12,14,16,18,20,22
F 4/28:   3.6 Taylor Series: 1,3,5,7,9,11,13,15,17,19,21,23,25
M 5/1:   3.6 Taylor Series: 2,4,6,8,10,12,14,16,18,20,22,24
W 5/3:   **Review**
F 5/5:   **Review**
M 5/8:   **Exam 3**
W 5/10:   **Final review**
F 5/12:   **Final review**

Final examination: Wednesday, May 17, 2:30 PM - 4:30 PM.

Important Dates:

January 23, Monday, Classes Begin
February 1, Wednesday, Summer 2023 Graduation Application Deadline (without late fee)
February 9, Thursday, Instructor Drop Deadline
February 9, Thursday, Credit/No Credit and Audit Grading Deadline
February 13-16, Monday-Thursday, Late Registration and Add/Drop via MYCSUDH -fees due at time of registration
February 17, Friday, Last Day to Drop from FT to PT Status with Refund
February 17, Friday, Drop without Record of Enrollment Deadline via Change of Program Form
February 17, Friday, Student Census
February 20-April 21, Monday-Friday, Serious and Compelling Reason Required to Withdraw
February 20, Monday, Presidents' Day Holiday (No Classes, Campus Open)
March 13-July 7, Monday-Friday, Summer 2023 Registration – fees due at time of registration
March 26-April 1, Sunday-Saturday, Spring Recess (includes César Chávez Holiday)
March 30, Thursday, Last Day for Pro-rata Refund of Non-Resident Tuition and Tuition Fees
March 31, Friday, César Chávez Day Holiday (No Classes, Campus Closed)
April 15, Saturday, Summer 2023 Graduation Application -Late Deadline (with late fee)
April 17, Monday, First day to file for Spring 2024 Graduation
April 17-August 20, Monday-Sunday, Fall 2023 Registration begins via MyCSUDH
April 24-May 12, Monday-Friday, Serious Accident/Illness Required to Withdraw
May 12, Friday, Last Day of Scheduled Classes
May 13-19, Saturday-Friday, Final Examinations
May 13, Saturday, Grades Submission Begins
May 19-20, Friday-Saturday, Commencement (visit site for more information)
May 22, Monday, Evaluation Day
May 23, 3 pm, Tuesday, Final Grades Due (College of Continuing and Professional Education grades always due 72 hours after course end date)