

Math G180 – Calculus 1 Fall 2025 Course Syllabus

CRN/DAYS/HOURS: 21530 (4 units) / Tuesdays and Thursdays 11:10 AM— 1:15 PM

FORMAT: Lectures in GWC Mathematics & Science Ctr 164

INSTRUCTOR: Gita Alemansour

E-MAIL: galemansour@gwc.cccd.edu; Please communicate with me either through the Canvas inbox

or Outlook (Subject: MathG180 TTh@11:10am and your Information) by using your GWC or Coast

email address, and I will respond within 48 hours (not including weekends).

OFFICE HOURS: On-campus: T/Th 1:20-2:20 PM in MS 108; Online: M/W 1:20-2:20 PM (by appointment)

COURSE DESCRIPTION: This is the first course in a three-course sequence designed for mathematics, science and engineering majors. The topics covered in this course include limits and continuity, derivatives of algebraic and transcendental functions, applications of derivatives, indefinite integrals, definite integrals, the Fundamental Theorem of Calculus and applications of integration.

TEXTBOOK: We will be using a free online eText for our textbook: OpenStax Calculus (Vol. 1). You may download this book for free in pdf. https://openstax.org/details/books/calculus-volume-1

CALCULATOR: The graphing calculator recommended for this class is TI-84. Other graphing calculators such as TI-89 or TI-92 are not permitted. Also, please note that graphing calculators are available to check out at the STEM center.

COURSE STUDENT LEARNING OUTCOMES (SLOs): The successful student will be able to

- 1. Evaluate definite and indefinite integrals.
- 2. Calculate limits when they exist and explain why when they do not exist.
- 3. Compute derivatives of polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions.

COURSE OBJECTIVES (OUTLINE): The successful student will be able to

- 1. State and apply the definitions of limits, derivatives, definite integrals, and indefinite integrals.
- 2. Determine if a function is continuous at a real number.
- 3. Find the derivative of a function as a limit.
- 4. Find the equation of a tangent line to a function.
- 5. Compute the derivatives of algebraic and transcendental functions using the definition, the sum rule, the product rule, the quotient rule, and the chain rule.
- 6. Compute the limit of a function with and without L'Hospital's Rule.
- 7. Use implicit differentiation.
- 8. Use differentiation to solve applications such as related rate problems and optimization problems.
- 9. Graph functions by applying information obtained from the first and second derivative.
- 10. Calculate definite integrals using the definition, formulas, Riemann Sums, and simple substitutions.
- 11. Evaluate definite integrals using the Fundamental Theorem of Calculus and using the Substitution Method.
- 12. Evaluate indefinite integrals using the definition, formulas, and simple substitutions.
- 13. Use definite integrals in terms of either x or y to compute areas.

STUDENT CONDUCT: You are expected to read the Mathematics Student Code of Behavior (Please refer to this link: http://www.goldenwestcollege.edu/catalog/student-code-of-conduct-ap-5500/). Your continued attendance of this class implies your acceptance of Student Code of Conduct, the terms of the syllabus and behavior guidelines in this syllabus. http://www.goldenwestcollege.edu/senate/facultyresources/

ATTENDANCE AND PARTICIPATION (drop policy): Attendance is mandatory for lecture meetings, but if a student is absent from a class, they may watch the recordings of the lecture zoom meetings under CCCD Zoom/Cloud Recordings in Canvas. Students may be dropped from the class if they are absent 3 days, without sending an email to notify me about their absences.

ACADEMIC ACCOMMODATIONS; Disabled Students Programs and Services (DSPS): Students with disabilities who believe they may need accommodations are encouraged to contact the Disabled Students Programs and Services (DSPS) as soon as possible in order to ensure that, if DSPS finds them qualified, such confidential accommodations are made in a timely fashion. Contact DSPS: 714-895-8721 dsps@gwc.ccc.edu https://gwc.craniumcafe.com/group/dsps/https://gwww.goldenwestcollege.edu/dsps/services/index.html

TUTORING - ACADEMIC SUCCESS CENTER:

For tutoring help please visit the Academic Success Center website at goldenwestcollege.edu/asc and/or contact Academic Success Center at academicsuccessctr@gwc.cccd.edu.

COUNSELING: General Counseling 714-895-8799 http://www.goldenwestcollege.edu/counseling/

Virtual Front Counter: https://gwc.craniumcafe.com/group/counseling

TRANSFER CENTER: Contact information 714-895-8794 http://www.goldenwestcollege.edu/transfer-center/

Virtual Front Counter https://gwc.craniumcafe.com/group/transfer

GOLDEN PROMISE PROGRAM: Do You Qualify for the GOLDEN PROMISE PROGRAM (GPP)? For more information, please visit this website: goldenwestcollege.edu/GOLDENPROMISE/

ADMISSIONS AND RECORDS: Admissions & Records (714) 895-8306 <u>arinfo@gwc.cccd.edu</u> <u>http://www.goldenwestcollege.edu/enrollment-center/</u> Virtual Front Counter: <u>https://gwc.craniumcafe.com/group/admissions--records</u>

ACADEMIC DISHONESTY: Academic dishonesty includes, but is not limited to, the following: Cheating, Plagiarism, Collusion, and/or other dishonest conduct. Students are expected to abide by ethical standards in preparing & presenting material which demonstrates their level of knowledge & is used to determine grades. Such standards are founded on basic concepts of integrity & honesty. Students share the responsibility for maintaining academic honesty & are expected to:

- 1. Refrain from acts of academic dishonesty.
- 2. Refuse to aid or abet any form of academic dishonesty.
- 3. Notify me and/or appropriate administrators about observed incidents of academic dishonesty.

You may receive an 'F' for the assignment and/or for the course in any case of academic dishonesty & reported to college officials. A grade of 'F' assigned to a student for academic dishonesty is final and shall be placed on the transcript.

Note: If the student withdraws from the course, a 'W' will not replace an 'F' assigned for academic dishonesty. Academic disciplinary actions taken by the instructor based on alleged cheating may be appealed as specified in the College's Instructional Grievance Policy. You are advised to read the sections on Student Code of Conduct & Academic Honesty in the college schedule. http://www.goldenwestcollege.edu/senate/facultyresources/

Golden West College Student Wellbeing Statement:

GWC is committed to supporting the wellbeing of all our students. If you or another student you know needs support, please do not hesitate to use the following resources:

- Comprehensive List of Student Services: For a comprehensive list of student services online resources, go to: http://www.goldenwestcollege.edu/student-services-online-resources/
- Physical and Mental Health Services: Current GWC students may receive free or very low-cost physical and mental health care at the Student Health Center, which is in the Nursing and Health Services building. Please check the Student Health Center website, http://www.goldenwestcollege.edu/student-health-center, or call for an appointment or more information: 714-895-8379.
- The Stand (Food Pantry): Visit the Basic Needs web page to register for the weekly distributions.
 https://www.goldenwestcollege.edu/basic-needspost/ (Student Equity (714) 892-7711, Ext. 55306
- **GWC Chromebook Loan Program**: If you don't have access to a personal computer, Chromebooks are available for students to borrow. Please submit a request on the Chromebook Loan web page here: https://www.goldenwestcollege.edu/student-equity/clp/
- Campus Emergency Information: (714) 895-8999

HOMEWORK:

- 1. Homework will be assigned in class (Please refer to pages 4 and 5 of the syllabus).
- 2. Each assignment set is graded and has a due date (Please refer to pages 4 and 5 of the syllabus).
- 3. It is your responsibility to check the homework assignments and the due dates.
- 4. If a homework packet is submitted late, for every 24 hours of late submission 20% of the grade will be deducted; for every 48 hours of late submission 40% of the grade will be deducted, etc.

QUIZZES:

Please refer to the tentative schedule on page 4 of the syllabus for the dates of the quizzes. Quiz dates are subject to change, if necessary. No make-up quizzes will be given, unless there in an emergency; In that case, please send me an email with a brief explanation and proof/documentation, and we will decide how to deal with the situation. Please note that this exception will be only for one quiz.

EXAMS:

There will be 2 exams given on the dates indicated on the tentative schedule on page 4 of the syllabus. Test dates are subject to change, if necessary. No makeup exams will be given, unless there is an emergency; In that case, please send me an email with a brief explanation and proof and/or documentation, and we will decide how to deal with the situation. Please note that this exception will be only for one exam.

FINAL EXAM:

The final exam will be comprehensive. Please refer to the tentative schedule on page 4 of the syllabus for the date of the final exam. No makeup final exams will be given.

CLASS ACTIVITIES:

The class activities category is graded based on the student's participation in class activities, completing all assignments, quizzes, and exams, and submitting all assignments, quizzes, and exams before the due date/time.

GRADING:

Grading Components	
3 Homework Assignment Packets (5% each)	15%
Class Activities	5%
3 Quizzes (10% each)	30%
2 Exams (15% each)	30%
1 Final Exam	20%
Total	100%

GRADE NOTIFICATION, POLICY AND DISTRIBUTION: Shortly after a test is taken, your grades will be posted on Canvas. The following structure will be used to determine your final course grade:

A	90.00-100%
В	80.00-89.99%
C	70.00-79.99%
D	60.00-69.99%
F	below 60%

CRITICAL DATES

Start Date: 25-AUG-2025 Last Date to drop without a "W": 07-SEP-2025 End Date: 13-DEC-2025 Last Date to drop with a "W": 15-NOV-2025

Last Date to add class: 07-SEP-2025 Census Date: 08-SEP-2025

Last Date to drop with a refund: 06-SEP-2025 Add Auth Expiration: 07-SEP-2025

<u>Tentative</u> Schedule Fall 2025 Math G180 – Calculus 1 - <u>21530</u> (4 units) - Tuesdays & Thursdays 11:10 am – 1:15 pm - Mathematics & Science Ctr 164

Quiz # 1
IW 1 due; Exam # 1
Quiz # 2
IW 2 due; Exam # 2
Quiz # 3
W 3 due; Final Exam

Math G180 – Assignment List (Subject to change)

- Chapter 1: Sections 1.1 1.5
 - Section 1.1: Numbers 7, 11, 15, 19, 35(*a-f*), 37
 - Section 1.2: Numbers 59, 63, 67, 71, 75, 79, 83-87(*a-c*) odd, 94-96 all
 - Section 1.3: Numbers 113, 117, 121, 125, 129, 133, 139, 143, 147, 151, 155, 159
 - Section 1.5: Numbers 233-238 all, 247, 251, 255, 259, 263, 271, 275, 279, 283, 287, 291, 295
- o Chapter 2: Sections 2.1 2.5
 - Section 2.2: Numbers 50-67 all, 71-75 all
 - Section 2.3: Numbers 83, 87, 91, 95, 99, 115, 116, 117
 - Section 2.4: Numbers 131, 135, 139, 143
 - Section 2.5: Number 188
- Chapter 3: Sections 3.1 3.9
 - Section 3.2: Numbers 55-58 all
 - Section 3.3: Numbers 107, 109, 113, 115, 119, 121, 133, 135, 137, 139, 143
 - Section 3.4: Numbers 151*a*, 153, 161, 163(*abd*)
 - Section 3.5: Numbers 175, 185, 187, 189, 193, 195, 199, 209, 211
 - Section 3.6: Numbers 221-227 (part b) odd, 229-237 odd, 241, 243
 - Section 3.8: Numbers 301, 303, 305, 309-315 *odd*, 319, 323*a*
 - Section 3.9: Numbers 331, 335, 339, 343, 347, 351, 355
- o Chapter 4: Sections 4.1 4.8, 4.10
 - Section 4.1: Numbers 1-7 odd, 11, 13, 17, 19, 21, 23
 - Section 4.3: Numbers 109, 131
 - Section 4.4: Numbers 171, 179
 - Section 4.5: Numbers 223, 225, 229
 - Section 4.7: Numbers 319, 321, 333
 - Section 4.8: Numbers 367, 371, 375, 379, 383, 387, 391, 399
 - Section 4.10: Numbers 471, 475-481 odd, 485, 487, 491-499 odd, 515, 517
- O Chapter 5: Sections 5.1 5.7
 - Section 5.1: Numbers 1-7 *odd*
 - Section 5.2: Numbers 77, 99, 101, 103
 - Section 5.3: Numbers 171-189 odd
 - Section 5.4: Numbers 207-211 *odd*, 223
 - Section 5.5: Numbers 261-281 *odd*, 285, 287, 293, 295, 297, 307
 - Section 5.6: Numbers 321, 329, 333, 337, 339, 341, 355, 357
 - Section 5.7: Numbers 391, 395, 399
- o Chapter 6: Sections 6.1
 - Section 6.1: Numbers 1, 3, 17, 31