

# Fall, 2025 Math 1501-A, Calculus I, 4 Credit Hours M,W,F 9:30AM-10:40AM

**Instructor Information** 

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Office Hours: M,W 3:00PM-5:00PM IC 234
T,R 11:00AM-1:00PM In TEAMS

#### **Course Description:**

An analysis of functions, limits, continuity, the derivative, antidifferentiation, the definite integral, and applications. Students must provide a graphing calculator.

#### **Course Prerequisites:**

Prerequisite: Grade of C or better in MATH 1113 or Math SAT score of 600 or Math ACT score of 26

Credit Hours: (4-0-4)

#### **Course Student Learning Objectives (SLOs):**

These objectives are directed toward the following general education expected outcomes of the college:

- 1. Analytical and Critical-Thinking Skills: Students should be able to reason and to think analytically in solving problems and making decisions.
- 2. Mathematical Skills: Students should be able to understand and apply fundamental mathematical concepts in solving problems.
- 3. Communications Skills: Students should be able to read and listen with understanding and to communicate clearly and effectively in writing and speaking.
- 4. Information Technology Skills: Students should be able to appropriately use a scientific and/or graphing calculator in solving various problems.

### **Subject Goals**

Upon completion of the course, student should be able to demonstrate an understanding of the following:

- 1. Limits of functions, limit properties, and continuity of functions.
- 2. Definition of the derivative, and differentiating all elementary functions using the definition of derivative and by using the sum, product, quotient, and chain rules.
- 3. Implicit differentiation.
- 4. Applications of the derivatives
- 5. Riemann sums; the definite and indefinite integrals and their properties.
- 6. The Fundamental Theorem of Calculus (Parts I & II).

- 7. Integration by substitution.
- 8. Applications of Integration.

#### **CORE IMPACTS Objectives:**

This is a Core IMPACTS course that is part of the Mathematics area.

Core IMPACTS refer to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

How do I measure the world?

Completion of this course should enable students to meet the following Learning Outcome:

 Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.

Course content, activities, and exercises in this course should help students develop the following Career-Ready Competencies:

- Information Literacy
- Inquiry and Analysis
- Problem-Solving

#### **Course Communication**

My preferred method of communication is GSC e-mail. My e-mail address is <a href="mailto:mzabdawi@gordonstate.edu">mzabdawi@gordonstate.edu</a>. I generally respond to e-mails within 24 hours during the week and 48 hours on the weekend. In your e-mails, please let me know which class you are in by including the class time and days.

For general course announcements, I will use the Announcement feature in D2L.

#### **Course Format:**

MODE OF DELIVERY: Course meets F2F every M,W,F 9:30AM-10:40AM in IC 224.

Read the attendance policy below.

## Last Day to Withdraw with a "W" is Friday (by 4:00 p.m.) October 10th, 2025

This course requires the online equivalent of 3000 minutes of instruction time and an additional 3000 minutes of supporting activities. Use the estimates below to allocate your time in the course, and in addition, plan to work independently for twice the listed time (approximately).

Activities	Instruction Time
Discussion Postings	280 minutes
Virtual Meetings/chat or audio and video	3000 minutes

Course Content Facilitation	800 minutes
Assignments and Exams	1800 minutes
Proctored Exam	120 minutes

#### **Course Resources:**

- No textbook is required because E-text is already integrated in WebAssign in D2L
- The TI-83 or TI-84 is required for this course.

#### **Course Assessments:**

• Grades will be computed based on any combination of the following:

ASSIGNMENTS	POINTS OR % OF GRADE
HW	20%
Average of 4 Exams	55%
Comprehensive proctored FE	25%

The course points fall: **90-100 (A) plus scoring at least 75% on the proctored FE**, 80-89 (B), 70-79 (C), 60-69 (D), and 59 and below (F).

You can expect to access the course materials and grades via our course in MyCourses (Brightspace by D2L). Students should check this MyCourses (Brightspace by D2L) course daily, as changes will always be announced and recorded on the course site.

#### Late Work:

- Late submission of HW and exams will be accepted but with 20% penalty for late submission. The penalty will be waived for legitimate documented excuse.

#### **Final Exam Details:**

- The proctored final exam is comprehensive and will be proctored by me in Web Assign. Date:

#### TBA.

#### **College-wide Statements:**

#### ATTENDANCE POLICY

Class attendance is expected of all students enrolled at Gordon State College. Being prepared for class in advance and participating on a regular basis is a vitally important ingredient for academic success. Research continually shows that poor attendance and/or limited participation usually results in low grades. However, because the delivery mode, content, assignments, and other particulars for each class section vary so widely, Gordon State College does not specify an official campus-wide attendance standard. Nonetheless, students who are absent with the approval of the Office of Academic Affairs will be permitted to earn credit for work missed during their absences. In addition, with the prior approval of the Academic Affairs office, dual enrollment students who are absent will also be permitted earn credit for work missed during their absences Approval of such activities will be granted by the Academic Affairs Office and posted online at

<u>Approved Absences</u>. Such excused absences are reserved for situations in which students are representing their school or the college. All students are responsible for contacting instructors prior to all excused absences in order to arrange to make up any missed work. Instructors will determine reasonable accommodations for missed coursework that best fit the circumstances of their course. Examples of reasonable accommodations might include but are not limited to:

- Rescheduling of an individual's quiz or exam;
- Revising the deadline for any out-of-class assignment at the instructor's discretion;
- Creating an alternate assignment with an equivalent grade.

At the beginning of each semester, every instructor will distribute a course syllabus and clearly state his or her attendance policy. It is the student's responsibility to inquire of the instructor if there are questions.

You need to log in D2L and complete at least one activity once a week, otherwise you'll be counted as absent.

A WF will be assigned as the final grade if the student stops attending class after 10/10/25

The instructor will notify the Registrar's Office in writing if a student receiving veteran's benefits is absent from a class three consecutive weeks in a fall or spring semester, two consecutive weeks in a full session summer semester, or one week in a half session summer semester.

Field trips and extracurricular activities which require a student's absence from class must be approved by the Provost; however, final approval for class absences remains with the individual instructor.

#### **Enrollment Verification:**

Every semester, faculty will provide electronic verification of class attendance for each student on each official class roll following procedures outlined by the Registrar. Class rolls become official at the close of the drop-add period each semester. Faculty enrollment verification is due on the tenth calendar day of fall and spring semesters and as announced for summer semester. Students reported as never attending a class by this date will be removed from the official class roll.

- For students who do not receive financial aid, loans or scholarships, tuition and fees will be recalculated after the class is removed from the schedule. If appropriate, a refund will be issued to the student.
- For students receiving financial aid, loans or scholarships, tuition and fees will be recalculated after the class is removed and financial aid, loans or scholarships will be adjusted accordingly. This adjustment could result in a reduction of aid awarded or loss of loan or scholarship funds.
  - No student will be enrolled in a class after the close of the drop/add period

Individual faculty may establish additional attendance requirements appropriate to their course's context, e.g. lab attendance. A student whose class schedule would otherwise prevent them from voting will be permitted an excused absence for the interval reasonably required for voting.

#### COMPUTER & ELECTRONIC EQUIPMENT USAGE POLICY

The rules stated below are (1) to assure that all College property, including, but not limited to, computer hardware and software, electronic and telephone systems are used for business purposes only, (2) to assure that all internal proprietary information is safeguarded, and (3) to advise employees and students that College equipment is not to be used to store or transmit information or items which they consider to be private or personal. The fact that the College may not have enforced these policies in the past should not be interpreted to mean that the College cannot enforce them now or in the future.

- 1. Only current faculty, staff, and students may use the College computer equipment, electronic equipment and software.
- 2. Students may use college computers and software for class assignments, term papers, projects, and/or tutorials for their courses.
- 3. Computer software is protected by United States copyright law. Most software manufacturers allow for use of software in classes or computer labs. The College does not condone use of its software for any other purpose.
- 4. Disk/files are subject to inspection by Gordon State College. Those found to contain unauthorized copies of copyrighted software will be erased.
- 5. In classes where computer networks are used, students may use only usernames, passwords, and files authorized by their instructor.
- 6. Unauthorized changes to machine configurations, system configuration programs, or batch files are prohibited.
- 7. Unauthorized additions, deletions, or modifications of application software are prohibited.
- 8. Gordon State College equipment cannot be used to type, transmit or print harassing, offending, illegal, sexually suggestive, or inappropriate messages.
- 9. All systems belonging to Gordon State College are subject to monitoring. The College reserves the right to enter and review all computer databases and electronic transmissions, including but not limited to, computer, electronic, and telephone systems.
- 10. Anyone who uses the College's computers and electronic equipment acknowledges and agrees to observe these policies.

#### STANDARDS OF ACADEMIC CONDUCT AND STUDENT INTEGRITY

- Gordon State College Academic Dishonesty Policy When a faculty member becomes aware of an act of academic dishonesty, the faculty member may penalize the act in one or any combination of five ways depending on the faculty member's assessment of the severity of the infraction.
  - 1. Assign a grade of F for the assignment and/or require remedial action by the student.
  - 2. Assign a grade of 0 for the assignment and/or require remedial action by the student.
  - 3. Assign a failing grade in the course.
  - 4. Assign penalties as stated in the course syllabus.
  - 5. Refer the matter to the Dean of the School. In addition, after having dealt with the act of academic dishonesty, the faculty member should send a brief memorandum to the Dean of the School identifying the student, the infraction, and the resolution. Academic deans will report egregious cases to the Dean of Students for placement in student record and potential additional action.

If the student wishes to contest the faculty member's decision, the student may appeal the decision to the Department Head and then the Dean of the School using the Academic Request process. When the matter reaches the School Dean by faculty member referral or student appeal, the Dean may ask the Academic Judicial Committee to consider the matter and make a recommendation. As stipulated in the Student Code

of Conduct found later in this catalog, the student may appeal the Committee's recommendation to the Provost and Vice President for Academic Affairs. When the deliberations are concluded, the Provost and Vice President for Academic Affairs will communicate the decision to both the student and the faculty member.

If the Dean of Students receives memoranda reporting two different incidents of academic dishonesty by the same student and neither case is overturned by appeal in the Office of Academic Affairs, the student will be summoned to the Student Affairs Office for appropriate disciplinary proceedings.

#### - Additional Definitions (adapted from MCNY)

- Cheating Receiving or providing unapproved help in any academic task, test or treatise. Cheating includes the attempt to use or the actual use of any unauthorized information, educational material, or learning aid in a test or assignment. Cheating includes multiple submission of any academic exercise more than once for credit without prior authorization and approval of the instructor.
- Plagiarism is presenting someone else's work as though it is your own. In an academic community, the use of words, ideas, or discoveries of another person without explicit, formal acknowledgment constitutes an act of theft or plagiarism. To avoid the charge of plagiarism, students must engage in standard academic practices such as putting quotation marks around words that are not their own, employing the appropriate documentation or citation, and including a formal acknowledgment of the source in the proper format. Students are expected to use the proper MLA or APA format for citations. Online guides for MLA and APA can be found at <a href="https://owl.purdue.edu">https://owl.purdue.edu</a>.
- Fabrication/falsification involves inventing or falsifying any data, information, or records.
- Obstruction is impeding the ability of another student to perform assigned work
- **Collusion** constitutes assisting with any of the above conduct or knowingly and voluntarily performing work that another student presents as their own.
- Use of AI: AI resources are not allowed on exams.
- Title IX & Mandatory Reporter Information: Gordon State College is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence and stalking. If you (or someone you know) has experienced or experiences any of these incidents, know that you are not alone. Please know also that all faculty members at GSC are mandated reporters. Any student reporting any type of sexual harassment, sexual assault, dating violence, domestic violence, or stalking must be made aware that any report made to a faculty member under the provisions of Title IX will be reported to the Title IX Coordinator or a Title IX Deputy Coordinator. If you wish to speak with someone confidentially, you can contact the Counseling and Accessibility Services via the email above. The licensed counselors in the Counseling Office can provide confidential support. GSC does not discriminate

against any student on the basis of pregnancy, parenting, or related conditions. Students seeking accommodations on the basis of pregnancy, parenting, or related conditions should contact Counseling and Accessibility Services at the email above regarding the process of documenting pregnancy related issues and being approved for accommodations, including pregnancy related absences as defined under Title IX."

- ADA, IEP, and 504: If you have a documented disability as described by the Americans with
  Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, you may be eligible to
  receive accommodations to assist in programmatic and/or physical accessibility. The Counseling
  and Accessibility Services office can assist you in formulating a reasonable accommodation plan
  and in providing support in developing appropriate accommodations to ensure equal access to all
  GSC programs and facilities." Contact Counseling and Accessibility Services at
  aliciad@gordonstate.edu
- COVID updates: <u>Covid update</u>
- Religious Holidays: GSC acknowledges that the academic calendar can sometimes conflict with
  major holidays from among our diverse religious traditions. If you need to miss class to observe a
  religious holiday, just let me know beforehand so we can figure out how you'll get your work
  completed.
- **School-Related Absences:** If you need to miss class because of a school-related activity (sports, field trips, etc.), please contact me.
- GA House Bill 280: See the University System of Georgia at the following link GA House Bill 280.

## Miscellaneous Student Resources:

- **Tutoring:** The GSC Student Success Center provides tutoring services for students on a variety of topics- Please see the Student Success Center's website for more information.
  - NetTutor This free online tutoring is available 24/7 via D2L. To access, select "Tools/Resources" from within the D2L course. Then select NetTutor & choose the subject. Leave a question or start live tutoring (link to tutoring hours will be in upper right corner). You can use the chat feature or ask tutor to turn on audio. These sessions are recorded, so you may watch them multiple times.
- **D2L:** Brightspace by D2L is GSC's online learning management system (LMS). Course materials and your gradebook are housed on D2L. Here are the instructions for getting into our course, in case you're new to this system:
  - Go to the homepage <u>www.gordonstate.edu</u>
  - Choose "My Gordon" link (top middle of page)
  - Choose "Brightspace by D2L"
  - Log in with GSC email username (do not include @gordonstate.edu) and current GSC email password
  - Once D2L opens, choose our class under the "My Courses" widget (on far right of page)
  - Choose "Content" on the course navigation bar at top to view our course materials.
    - Do Note that you cannot see any of your courses in D2L until the first official day of classes. If you add the class in Banner Web during the Drop/Add period, it will take an overnight process for you to be added into D2L.
- Assistance with D2L:

- If you cannot log in, <u>consider resetting your password here</u> (passwords must have uppercase letters, lowercase letters, numbers/symbols, must be at least 10 characters and cannot include name/username).
- If you still cannot log in or if you have some other weird problem, then email d2lhelp@gordonstate.edu and provide your name, your 929 number, and the course/section information. This email is checked M-F, 8-5.
- You also have access to a 24/7 Live Chat hosted by the University System of Georgia.
   Chat live here.
- Assistance with computer hardware (i.e., loading Microsoft Office, removing a virus from your computer, etc.)
  - You can call GSC Information Technology at 678-359-5008. They are open M-F 8-5. If you leave a voicemail, please include your name, 929 number, a brief description of the problem, and a call-back number.
  - You can go to GSC Information Technology in the Instructional Complex Building, room 109.
- Computers on Campus: There are computers all over the campus if you need to use one, including in the first-floor computer lab of the Instructional Complex (IC), as well as in Academic, Russell, Smith, Nursing & Allied Health Services, Hightower Library, and the Student Success Center. If you live in the residence halls, there are computer labs located there as well.
- Counseling and Accessibility Services Office: If you (or someone you care for at GSC) feels
  overwhelmed, depressed, or in need of support, Telehealth for mental health counseling is
  available 24/7/365 through UWILL at <a href="https://app.uwill.com">https://app.uwill.com</a>
  - Please know that there is also a 24-hour mental health support line: 833-646-1526
  - Please feel free to contact the office with any questions at 678-359-5585
- **Highlander House**: If you or someone you know is facing food insecurity or needs toiletry items, check out this free student success resource: SARC 113.
- Career Services Center: Our Career Services Center offers many forms of assistance for you, such as Kuder Interest Assessments; Career readiness, preparation, & assistance; internship preparation & opportunities; Toastmasters; Professional Development Events; and Community Engagement & Service-Learning opportunities (328 Lambdin Hall, 678.359.5719).

**Library Services:** The Hightower Collaborative Learning Center & Library offers Gordon State students specialized library research assistance. Students can meet with their personal librarians for one-on-one help in each discipline, major, or course to search and evaluate information sources effectively. Go to http://libcal.gordonstate.edu/ to schedule an appointment by clicking the Personal Librarian tab or click on the Presentation Practice Room tab to make a reservation. For immediate help, call 678-359-5076 or stop by the Circulation/Check-Out Desk. You can also Ask A Librarian or drop by the Circulation/Checkout Desk. Check the library's web site for hours, electronic resources, and LibGuides (subject- or class specific research guides)

#### **COURSE CALENDAR:**

MATH 1501-A Fall 2025 Course Outline

## HW is assigned and graded electronically in WebAssign

Section	HW is assigned in WebAssign
1.5: The limit of a function	
1.6: Calculating Limits Using the Limit L:aws	
1.7: The Precise Definition of a Limit	
1.8: Continuity	
Exam I	
2.1: Derivatives and Rates of Change	
2.2: The Derivative as a Function	
2.3: Differentiation Formulas	
2.4: Derivatives of Trigonometric Functions	
2.5: The Chain Rule	
2.6: Implicit Differentiation	
2.8: Related Rates	
2.9: Linear Approximations and Differentials	
Exam II	
3.1: Maximum and Minimum Values	
3.2: The Mean Value Theorem	
3.3: How Derivatives Affect the Shape of a Graph	
3.4: Limits at Infinity: Horizontal Asymptotes	
<ul><li>3.5: Summary of Curve Sketching</li><li>3.7: Optimization Problems</li></ul>	
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3.8: Newton's Method	
3.9: Anti-Derivatives	
Exam III	
4.1: Areas and Distances	
4.2: The Definite Integral	
4.3: The Fundamental Theorem of Calculus	
4.4: Indefinite Integrals and the Net Change Theorem	
4.5: The Substitution Rule	
Exam IV	
5.1: Areas Between Curves	
5.2: Volumes	
5.3: Volumes by Cylindrical Shells	
5.5: Average Value of a Function	
Review	
Final Exam	In WebAssign TBA.
Study Hard	FE will be available in WebAssign. You have 120 minutes to do the FE and only one attempt.

<sup>\*</sup> This course syllabus provides a general plan for this course. The Faculty reserves the right to make changes to the syllabus, including changes to assignments, projects, examinations, etc., in order to accommodate the needs of the class as a whole and fulfill the goals of the course.