

Gordon State College University System of Georgia

#### **Department of Applied Sciences**

419 College Drive Barnesville, GA 30204 Ph. 678/359-5468 www.gordonstate.edu



#### Fall 2023

Math 1502-A Calculus II

Instructor: Dr. M. ZABDAWI

Email: mzabdawi@gordonstate.edu

Office Location: IC 234 & Online in TEAMS Office Hours T,R 11:30AM-12:30PM

T,W,R 5:00PM- 7:00PM Class Location: IC 224

Class Times: M,W,F 11:00AM-12:10PM

#### **TEXT (S) AND OTHER RESOURCES**

Textbooks: Do not buy the textbook. Your E-Text, HW & Exams from Cengage WebAssign are already integrated in your course in D2L.

#### **CATALOG DESCRIPTION:**

MATH 1502: Calculus II

Prerequisite: MATH 1501 Credit Hours: (4-0-4)

An analysis of derivatives and integrals of transcendental and inverse trigonometric functions, techniques of integration, improper integrals, L'Hospital's Rule, infinite series, and conics. Students must provide a graphing calculator.

#### **CONCEPTUAL FRAMEWORK:**

#### **Department of Applied Sciences Vision**

Provide a supportive and empowering environment where students can prepare for their future careers and a lifetime of learning.

## **Department of Applied Sciences Mission**

To foster student access and achievement through innovative teaching, engaged learning, and supportive pedagogy.

#### **Instructor Teaching Philosophy**

We will be using Cengage WebAssign for HW and testing including the FE. WebAssign is already integrated in D2L All PDF and power-point lecture files are also downloaded in D2L. Some if not most of

the HW will be done in WebAssign during lectures to better explain and illustrate the ideas. Remember Mathematics is not a spectators sport, and your HW is meant to be the training ground where you learn how to bridge the gap between your thoughts and the tips of your fingers.

## STUDENT LEARNING OUTCOMES:

**Upon completion of the course, student should:** 

- 1. Differentiate and integrate Inverse Trig. Functions.
- 2. Integrate by parts and by partial fractions.
- 3. Integrate using Trig. Substitution, and have a solid strategy for integration.
- 4. Know how to apply L'Hospital's Rule and how to evaluate improper integrals.
- 5. Know approximate integration using Trapezoidal and Simpson's rules.
- 6. Know how to compute arc length and area of surface of revolution in Rectangular and Polar Coordinates.
- 7. Understand convergence & divergence of sequences and series, and know how to approximate functions using Taylor and Maclaurin series.

#### **REQUIREMENTS:**

This course requires the online equivalent of 3150 minutes of instruction (instruction time) and an additional 4500 minutes of supporting activities. As such, you will be required to complete the following activities during this course (times are approximate):

Instruction Time	Minutes
Exams	350 minutes
Discussions	350 minutes
Course Content Facilitation	2150 minutes
<b>Graded Assignments/ Research</b>	300 minutes
Total	3150 minutes

It is anticipated that students will need to work independently for twice the number of minutes listed above to complete the online activities.

20% penalty applies for late submission of HW and exams. Students who do not take the FE will get an automatic WF for the course. Students are responsible for studying two hours outside of class for every hour in class. Studying includes activities beyond what is immediately due. For example, solving extra problems, working in a study group to teach material, going to see a tutor, writing chapter summaries, recopying notes, and creating flash cards are all common methods students use to master course material.

It is expected that you are aware of and understand that you are bound by the principles of honesty and integrity as outlined in the current Gordon State College catalog. Please review this information. Be aware that it is also college policy that you may be withdrawn from a course for excessive absences.

The last date to withdraw from class without receiving a WF is <u>Friday</u>, <u>October 13<sup>th</sup> 2023</u>. Please note that it is the college's policy that students must withdraw from class by <u>5:00PM Friday</u>, <u>10/13/23</u> in order to receive a grade of W. After <u>10/13/23</u>, if a student requests a W – that student must petition to be withdrawn from the class and fill out the necessary petition paperwork.

#### **ASSESSMENT**

HW Avg. = 20% of grade, Exams Avg. = 55% f grade, FE = 25% of grade.

A = 90.0% -100% D = 60.0% - 69.4% F = 59.4% and below

C = 70.0% - 79.4%

#### **ACADEMIC INTEGRITY**

## **Academic Integrity:**

Ref.: Student Code of Conduct – Academic Catalog.

Ref.: Georgia Code of Ethics for Educators

It's normal for learning to be effortful, and with good planning and attention to detail, all students can be successful in this course. Yes, using Spinbot, ChatGPT, or other online cheating tools will not be tolerated. The purpose of completing assignments is to make your thinking visible, and obstructing that process obstructs your learning. Indeed, academic dishonesty in any form will not be tolerated. No assignments in this class are collaborative unless designated as such; all ideas and writing submitted must be originally composed and edited by the enrolled student specifically for the assignment in this specific course. If one is repeating the course, one may not submit assignments composed during previous attempts. If one is taking another course with a similar assignment, one may not submit the same assignment for both courses. A detailed explanation of the plagiarism policy, its rationale, and the consequences for its violation can be found in the current academic catalog.

## **Title IX**

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. All faculty members at Gordon State College 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 must contact the Counseling and Accessibility Services office, Room 212, Student Life Center. The licensed counselors in the Counseling Office are able to provide confidential support. Gordon State College 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 regarding the process of documenting pregnancy related issues and being approved for accommodations, including pregnancy related absences as defined under Title IX.

#### ADA 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 located in the Student Center, Room 212 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. Course requirements will not be waived, but accommodations may assist you in meeting the

requirements. For documentation requirements and for additional information, contact Counseling and Accessibility Services at 678-359-5585.

#### **House Bill 280**

For information regarding Campus Carry, see the University System of Georgia at the following link: <a href="https://www.usg.edu/weaponscarry/guidance">https://www.usg.edu/weaponscarry/guidance</a>.

## **Religious Holidays**

Gordon State College acknowledges that the academic calendar can sometimes conflict with major holidays from among our diverse religious traditions. If a student must miss class due to the observance of a religious holiday, that absence may be excused. To be excused, the student must inform his/her instructors before the absence and make alternate arrangements for any work due at the time of the absence. An excused absence for the observance of a religious holiday does not excuse student from responsibility for required course work.

## **Hightower Collaborative Learning Center & Library**

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/Check Out Desk. Check the library's web site for hours, electronic resources, and LibGuides (subject- or class specific research guides)

## HW is assigned and graded electronically in WebAssign.

# Course Schedule

Monday	Wednesday	Friday
•	8/16: Sec.6.1	8/18: Sec. 6.2*
8/21: Sec. 6.3*	8/23: Sec. 6.4*	8/25: Sec. 6.6
8/28: Sec. 6.8	8/30: Sec. 6.8 (Concluded)	9/1: EX I
9/4: Labor Day Holiday	9/6: Sec. 7.1	9/8: Sec. 7.1 (Concluded) Sec 7.2
9/11: Sec. 7.2 (Concluded)	9/13: Sec. 7.3	9/15: Sec. 7.3 (Concluded) Sec. 7.4
9/18: Sec. 7.4 (Concluded)	9/20: Sec. 7.5	9/22: EX II
9/25: Sec. 7.7	9/27: Sec. 7.8	9/29: Sec 7.8 (Concluded)
10/2: Sec 8.1	10/4: Sec. 8.2	10/6: Sec. 8.2 (Concluded)
10/9: EX III	10/11: Sec. 11.1	10/13: Sec. 11.2
10/16: Fall Break	10/18: Sec. 11.2 (Concluded)	10/20: Sec. 11.3
10/23: Sec. 11.4	10/25: Sec. 11.5	10/27: Sec. 11.6
10/30: Sec. 11.7	11/1: EX IV	11/3: Sec. 11.8
11/6: Sec. 11.8 (Concluded)	11/8: Sec. 11.9	11/10: Sec. 11.9 (Concluded)
11/13: Sec. 11.10	11/15: Sec. 11.11	11/17: Sec. 11.11 (Concluded)
11/20: EX V	11/22: Thanksgiving Break	11/24: Thanksgiving Break
11/27: Sec. 10.3	11/29: Sec. 10.3 (Concluded)	12/1: Sec. 10.4
12/4: Sec. 10.4 (Concluded)	12/6: Review	FE Friday 12/8/23 10:15AM-12:15PM IC 224 And FE in WebAssign The average of the two attempts will be recorded.