

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 1001-A
Quantitative Skills & Reasoning

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 310

Class Times: T,R 3:30PM-4:45PM

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

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

## **CATALOG DESCRIPTION:**

Math 1001: Quantitative Skills and Reasoning

**Credit Hours: (3-0-3)** 

This course places quantitative skills and reasoning in the context of experiences that students will be likely to encounter. It emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. 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 Pearson's MyMathLab for HW and testing including the FE. MyMathLab 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 Pearson's during lectures to better explain and illustrate the ideas. **Remember** 

<u>Mathematics is not a spectators sport</u>, 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. Use knowledge of logical fallacies, truth tables, and Venn diagrams to determine the soundness of logical arguments.
- 2. Determine the validity of a statistical study and what information can be inferred from it.
- 3. Use and interpret descriptive statistics in numerical and graphical forms.
- 4. Solve basic applied problems involving unit conversion and probability.
- 5. Interpret and apply linear, quadratic, and exponential models, including applications involving financial literacy.

# **REQUIREMENTS:**

This course requires the online equivalent of 2,250 minutes of instruction (instruction time) and an additional 4500 minutes of supporting activities. As such, you will be required to complete the following online activities during this course (times are approximate):

Instruction Time	Minutes
Exams	225 minutes
Discussions	225 minutes
Course Content Facilitation	1,600 minutes
Graded Assignments/ Research	200 minutes
Total	2,250 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 MyMathLab.

Section	
1B: Propositions and Truth Values	
1C: Sets and Venn Diagrams	
1D: Analyzing Arguments*	
2A: The Problem-Solving Power of Units*	
4B: The Power of Compounding	
4C: Plans and Investments*	OPTIONAL
EX I	
5A: Fundamentals of Statistics	
5B: Should You Believe a Statistical Study?*	
5C: Statistical Tables and Graphs	
5D: Graphs in the Media*	
5E: Correlation and Causality	
EX II	
6A: Characterizing Data 6B: Measures of Variation	
7A: Fundamentals of Probability 7B: Combining Probabilities	
EX III	
<ul><li>9A: The Building Blocks of Mathematical Models</li><li>9B: Linear Models</li><li>9B: Supplement (Handout) Fitting Linear Models to Data*</li></ul>	
8A: Growth: Linear vs. Exponential*	
8B: Doubling Time and Half-Life* 8C: Real population Growth*	
9C: Exponential Models*	
Exam IV	
FINAL EXAMINATION	FE: Comprehensive Thursday 12/7/23 5:00PM-7:00PM IC 103