Course Information

Course Number & Title MATH 1111-F College Algebra	Term Spring Semester 2024	Catalog Description This course is a functional approach to algebra that incorporates the use of appropriate technology. Emphasis will be placed on the study of functions, and their graphs, inequalities, and linear, quadratic, piece-wise defined, rational, polynomial, exponential, and logarithmic functions. Appropriate applications will be included.
Credit Hours 3	Class Meeting Days & Time Monday, Wednesday 9:30AM-10:45AM	Class Meeting Location(s) IC 222
Course Prerequisites Exemption from or Completion of Learning Support Mathematics, or High School GPA of 3.2	Required Texts/Materials • **eText:** Sullivan, Michael. 2019. *Algebra & Trigonometry.* 11th edition. Pearson Prentice Hall. The **eText** is already integrated in D2L and was part of your tuition. • **Calculator:** A graphing calculator is required. A Texas Instruments TI-83/TI-84 or higher or equivalent is recommended.	Last day to withdraw with a W Thursday, March 14, 2024

Instructor Information

Professor	Office Location	Office Phone Number
Dr. Marwan Zabdawi	Instructional Complex 234	(678) 359-5839
Times available in office • **M, W:** 11:00AM-12:00PM • STEM Center IC 319 • **M, W:** 2:00PM-3:30PM IC 234 • **T, R:** 9:00AM-10:00AM In Teams • **T:** 12:30PM-1:30PM In Teams • **T:** 2:30PM-4:30PM In Teams	**E-mail address** mzabdawi@gordonstate.edu	**Official Means of Communication** Gordon State E-mail mzabdawi@gordonstate.edu

Course Student Learning Objectives (SLOs)

During the course, students should learn to do the following:
1. Master manipulation of algebraic expressions.
2. Solve applied problems and determine if the answer makes sense.
3. Develop some understanding, conceptually or numerically, of why the mathematical techniques they use are valid.
4. Apply mathematical techniques in unfamiliar contexts.
5. Learn mathematical ideas by reading.

Subject Goals

By the end of the course, you should be able to demonstrate an understanding of the following:

1. Solve linear, quadratic, radical, absolute value, exponential, and logarithmic equations; linear, absolute value, polynomial, and rational inequalities; and systems of linear equations.
2. Employ fundamental concepts of functions, including composition of functions.
3. Graph equations, interpret graphs, and analyze the properties of linear, quadratic, circular, polynomial, exponential, and logarithmic graphs and functions.
4. Learn mathematical ideas by reading and demonstrate understanding, conceptually or numerically, of why the mathematical techniques they use are valid.
5. Solve applied problems and determine if the answer makes sense.

IMPACT CORE 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 mzabdawi@gordonstate.edu. 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 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.**

Course Format

Class meets F2F every M,W 9:30AM-10:45AM in IC 222.

MATH 1111-F

Spring Semester 2024
Course Outline

HW is assigned and graded electronically in MyMathLab.

Section	Suggested Homework Problems
R.1: Real Numbers	
R.2: Algebra Review	
R.3: Geometry Review	
R.4: Polynomials	
R.5: Factoring Polynomials	
R.6: Polynomial Division; Synthetic Division	
R.7: Rational Expressions	
R.8: nth Roots; Rational Exponents	
1.1: Linear Equations	
1.2: Quadratic Equations	
1.4: Radical Equations; Equations Quadratic in form; Factorable Equations	
1.5: Solving Inequalities	
1.6: Equations and Inequalities Involving Absolute Value	
Exam I (Not Proctored)	
2.1: The Distance and Midpoint Formulas	
2.2: Graphs of Equations	
2.3: Lines	
2.4: Circles	
3.1: Functions	

Section	Suggested Homework Problems
3.2: The Graph of a Function	
Exam II (Not Proctored)	
4.1: Linear Functions and Their Properties	
4.3: Quadratic Functions and Their Properties	
5.1: Polynomial Functions and Models	
5.4: Polynomials and Rational Inequalities	
5.5: The Real Zeros of a Polynomial Function	
Exam III (Not Proctored)	
6.1 & 6.2: Composite Functions & Inverse Functions	
6.3: Exponential Functions	
6.4: Logarithmic Functions	
6.5: Properties of Logarithms	
6.6: Logarithmic and Exponential Equations	
6.7: Financial Models	
12.1: Systems of Linear Equations: Substitution and Elimination	
EX IV (Not Proctored)	
Final Review	
Final Exam	**FE: Proctored in computer lab IC 103 Monday May 13th 10:15AM-12:15PM.**

Course Assessments

Category	Assessment Information/Turn-Around Time	Percentage of overall grade
Participation	Course is conducted Asynchronously Online. Attendance is not required but encouraged.	
Homework	HW is assigned in MyMathLab on a weekly basis. I'll be doing HW after lectures and everything will be recorded in Teams.	20%
Exams	Four online exams (**not proctored**). Two attempts per exam, and the best attempt will be recorded.	55%
Final Exam **Students who do not take the FE will get an automatic WF for the course.**	**Proctored Online By me. It won't cost you a penny. More info. is forthcoming.**	25%

Conversion Chart	
89.5+ and FE≥75%	A
79.5-89.49	B
69.5-79.49	C
59.5-69.49	D
Below 59.5	F

Class Policy Info

- **Inclusion & Equity:** I strive for my class to be very inclusive and equitable. If I ever do or say anything that makes you feel as though you do not belong, please let me know. If anyone else in the classroom does or says anything that makes you feel as though you do not belong, let me know that too, and I will have a serious talk with them. Also, if I need to adjust any element in order to make the course more equitable for you, please let me know as soon as possible.

- **Punctuality, Makeups, & Late Stuff:** 20% penalty is automatically applied for late submission of HW and exams. Penalty will be waived for legitimate documented excuse.

- **Academic Integrity & Plagiarism:** Here's a link to the Student Code of Conduct: https://www.gordonstate.edu/student-life/dean-of-students/student-conduct/index.html.

- **Electronic Devices Policy:**

1. **Electronic Devices During Tests:** The use of electronic devices (iPhone, iPad, smartphones, tablets, laptops, iPods, etc.) is prohibited during tests. Only hand-held scientific and/or graphing calculators are allowed.

Academic Integrity

Ref.: Student Code of Conduct – Academic Catalog.

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.

College-wide Statements

- **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 are able to 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:** https://www.gordonstate.edu/corona-virus/index.html
- **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 http://www.usg.edu/hb280.

Miscellaneous Student Resources

- **How You Can Accomplish Goals in This and Other Courses:**
  1. Prepare for lecture. Read the textbook and do the examples there (don't just look at how the book did it). Do any worksheets or other lecture preparation activities. Look over the previous lecture notes right before class.
  2. Actively participate in the lecture. Ask questions.
  3. Review the lecture. Read over your notes as soon as possible after the lecture. Where needed restate your notes so they make more sense to you.
  4. Study mathematical concepts a little each day. Being able to do the problems is not enough. Explain ideas and how you solve problems as if you were teaching a class. Memorize formulas and rules, understanding why they are true will help.
  5. Do the homework. Complete all of the problems, not just the ones you already know how to do. Work on the problems without looking at examples from online videos or the book; your goal is to learn math, not to learn how to copy material from a video. Check your work. Don't enter an answer unless you are certain it is correct.
  6. Use resources. The student success center (SSC), professor student hours or review sessions, and student study groups can help you clarify things that are hard to understand and learn challenging concepts.
  7. Prepare for quizzes and exams. Make your own study guides. Make sure to get 8 hours of sleep the night before an exam.
  8. Monitor your progress. If things are not going well, ask your professor for suggestions as soon as possible. Don't wait until the week before an exam.
- **Skills You Need to Succeed in College:**
  1. Health management. Get enough sleep, water, nutrition, and exercise. Manage stress.
  2. Time management. Schedule 1 – 2 hours for studying math each day. Keep track of deadlines.
  3. Strong work ethic. Learning math is a major commitment.
  4. Curiosity. Even when the material seems boring, ask yourself why things work the way they do.

5. Adaptability. If you treat this course as a harder version of high school, you will be much less successful.
6. Using resources. Asking questions and visiting the Student Success Center (SSC) are signs that your education matters enough to you to take advantage of every available opportunity.
7. Self-awareness. Honestly assess which concepts you understand and which require more work. Keep track of what studying techniques work best for you.
8. High expectations. Don't settle for anything less than your best.

- **Tutoring:** The GSC Student Success Center provides tutoring services for students on a variety of topics. [They also provide online academic resources.](#) [Please see the Student Success Center's website for more information.](#)
  - o **NetTutor** This free online tutoring is available 24/7 via D2L. To access, select "Tools/Resources" from within the D2L course. Then select NetTutor & pick 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 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:
  - o Go to the homepage www.gordonstate.edu
  - o Choose "My Gordon" link (top middle of page)
  - o Choose "Brightspace by D2L"
  - o Log in with GSC email username (do not include [@gordonstate.edu](#)) and current GSC email password
  - o Once D2L opens, choose our class under the "My Courses" widget (on far right of page)
  - o Choose "Content" on the course navigation bar at top to view our course materials.
    - o 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:**
  - o If you cannot log in, [Consider resetting your password here](#) (passwords must have uppercase letters, lowercase letters, numbers/symbols, must be at least 10 characters and cannot include name/username).
  - o 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.
  - o 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.)
  - o 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.
  - o 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, please contact this office for free counseling. alisonb@gordonstate.edu
    o Please know that there is also a 24-hour crisis line available: 1-800-715-4225
- **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)