MAT 115: College Algebra

Spring 2025

Instructor:	Jared Adam McBride	**Email:**	jared.mcbride@svu.edu
Office:	111 Magnolia Hall	**Time:**	MWF 9:00 – 9:50
Phone:	(480) 695-5627	**Place:**	100 Craton Hall[a]

[a] *This is the first door on the right as you enter Craton Hall from the main (south) entrance.*

"Character is the aim of true education; and science, history, and literature are but means used to accomplish the desired end. Character is not the result of chance work but of continuous right thinking and right acting. . . . True education seeks, then to make men and women not only good mathematicians, proficient linguists, profound scientists, or brilliant literary lights, but also honest men, combined with virtue, temperance, and brotherly love — men and women who prize truth, justice, wisdom, benevolence, and self-control as the choicest acquisitions of a successful life. . . . It is regrettable, not to say deplorable, that modern education so little emphasizes these fundamental elements of true character. The principal aim of many of our schools and colleges seems to be to give the students purely intellectual attainments and to give but passing regard to the nobler and more necessary development along moral lines."

—David O. McKay
(*Gospel Ideals*, p. 440)

Student Hours: Student hours are like office hours but they are not in my office. They are held, instead, right next door in the Magnolia Hall conference room (Magnolia Hall 109). They are at these times:

Tuesday and Thursday from 12:00 PM to 4:00 PM.

or by appointment. If you can't make student hours physically but can drop in on Zoom, please let me know before hand. The Zoom link will be https://zoom.us/my/drmcbsvu. Please, feel free to drop in with your questions. No appointment is necessary.

If you have a private matter to discuss, please make an appointment to see me. If it is quick (these things usually are) feel free to come to student hours and we can step into my office.

My tentative weekly schedule is as follows:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:00 AM					
8:00 AM	CSC340		CSC340		CSC340
9:00 AM	MAT115	MAT221	MAT115	MAT221	MAT115
10:00 AM	MAT343	MAT221	MAT343	MAT221	MAT343
11:00 AM	MAT221		MAT221		
12:00 PM	MAT221	Student Hours	MAT221	Student Hours	
1:00 PM		Student Hours		Student Hours	
2:00 PM		Student Hours		Student Hours	
3:00 PM		Student Hours		Student Hours	
4:00 PM					

AI Use Policy: The purpose of this course is to help you develop both skills and deep understanding—especially of mathematical concepts. Homework and assignments are designed to give you the practice you need to build those skills.

Some students may be tempted to use AI tools to complete their work instead of working through problems themselves. This is like signing up for a weight training class but using a machine to do the lifting for you—–you wouldn't build the strength you need. The same is true here: if AI does the work, you miss the chance to develop the understanding and skills necessary for success in this course and in future courses.

That said, AI can be a helpful learning aid when used appropriately. Think of it like using a box to assist with pull-ups: you can use the box to help you get above the bar, then slowly lower yourself to build strength. After a while, you'll be able to do pull-ups without the box. Similarly, you can use AI to help you get "unstuck" on a problem—by asking for hints, clarifications, or explanations of a concept—rather than simply asking for the full answer. This is what I refere to as using AI wisely.

Guidelines for using AI in this course:

- **Wise use:** Asking AI for hints, clarifications, or help understanding a concept on homework.
- **Not acceptable:** Having AI fully complete homework or assignments for you.
- **Not acceptable:** Using AI at all on exams or quizzes.
- **Goal:** Use AI as a tool to support your learning, not replace it.

If you rely on AI to do the work for you, you may finish assignments faster, but you will not develop the skills you need to succeed—not just in this course, but in all courses that build on it.

Textbook: We will be using *Algebra and Trigonometry 2e* by OpenStax. The book is available online and free.

Required Materials:

- A one-year subscription to XYZHomework.com is required to complete the homework.

  NOTE: The easiest way to purchase the subscription is through Canvas so that it is already linked to the course. You can sign up for free and use the software for 14 days before you have to purchase.
- iPad Apps: Canvas Student, Desmos, and an app of your choosing that will scan/convert/export as PDF, such as Adobe Scan or CamScanner.

Course Description: Designed for students with a solid background in high school algebra. Provides a basis for further mathematical study. Students with a strong mathematical background should take MAT 241 rather than MAT 115. Topics include equations, inequalities, graphs, linear functions, polynomial functions, rational functions, exponential functions, logarithmic functions, and trigonometric functions.

Prerequisites: Strong background in high school algebra, MAT 105, or permission of instructor.

Course expectations:

- Regular attendance is essential and expected.
- In general, it is expected that you will spend at least **2 hours** outside of class for each hour in class in order to understand the material. To achieve excellence, more time may be required. So, budget at least 6 hours each week (in addition to class time) to spend learning this material. Note that if you are taking 15 credits that comes to about 45 hours of work a week.
- Cell phone usage during class is very distracting and is strongly discouraged. Unless you are expecting an emergency call, keep your cell phone on silent. Please do yourself a favor and allow yourself to focus by not using your phone.

- Class time is work time. During the times we meet, I expect you to be ready to work. This is not a lecture series in which you can sit and listen passively. My goal will be to get each of you to exercise your minds each day in class.

Grading Scheme:

Reading Guides	20%
Retention Quizzes	5%
XYZ Homework	20%
XYZ Written Work	10%
3 Midterm Celebrations of Knowledge (10% each)	30%
Final	15%
Total	100%

(The percentages guarantee at least the following letter grades.)

A	93%	C+	77%
A-	90%	C	73%
B+	87%	C-	70%
B	83%	D+	67%
B-	80%	D	63%

Reading Guides (20%): For each section of the textbook, a reading guide will be provided. During class, we will work through the guide together, and you are expected to complete it alongside me. These guides are designed to help you think carefully about the material, organize your notes, and reinforce your understanding.

We may not finish every guide during class time. If that happens, you are responsible for completing the remainder before the next class meeting. To receive credit, each reading guide must be filled out and uploaded as a PDF before the following class. Each reading guide is out of 10 points. If you miss class without advanced notice or a valid excuse, you can still complete the reading guide for 50% credit, provided it is submitted within a week of the class meeting.

Lesson Quizzes (5%): Short, low-stakes quizzes will be given after most class meetings. Their purpose is to help you check your understanding of the material from both class and your own study. When taking these quizzes, it is best to try recalling answers from memory first, since that is one of the most effective ways to strengthen learning and reduce forgetting. However, you may also use your notes or textbook if needed. Please do not use AI on these quizzes.

At the end of the semester, at least your **two lowest** quiz scores will be dropped when calculating your final grade.

XYZ Homework (20%):

Homework assignments will be completed through an online system: www.xyzhomework.com. This platform is integrated with Canvas, so your scores should automatically appear in the Canvas gradebook. The system allows you to enter your answers and receive immediate, automated grading. At the end of the semester, your 2 lowest homework scores will be dropped. Please, use AI wisely on these assignments.

To access the homework, simply open any XYZ Homework assignment in Canvas. The first time you do this, you will be prompted either to log in (if you already have an account) or to create a new account. You will begin with a 15-day trial period, after which your account must be activated. This can also be done directly through Canvas. Most students are able to complete this process without difficulty, but if you encounter any issues, please be patient and let me know right away so we can resolve them.

Note: As you activate you account it will ask if you have an access code, these are often included with a new textbook purchase. Since we are using a free textbook, *you will not have an access code.* You will need to activate you account with an online (discounted) purchase.

A discounted subscription is available through the OpenStax Pass using the discount code `XYZF25`. Remember, the textbook itself is free. Many students have found this link very helpful: https://xyzhomework.com/support/enrollment-activation-lti

All homework must be completed and submitted by **December 10 at 11:59 pm** in order to be included in your final grade.

Written Work (10%): As you work through the XYZ homework, you need to show your work for each question on scratch paper. Once you complete the assignment, you will need to scan or export these pages and upload them as a PDF

file to the appropriate "Written Work" in Canvas. This portion of the assignment is graded on completion, and you will lose one point for each missing question. The goal here is for you to get instant feedback through XYZ while at the same time allowing me to see how you work. Please provide enough detail so that if you get something wrong in XYZ I should be able to look at the scratch work and find what went wrong; that is what I am most interested in.

Late Work: Late work is accepted within the following parameters:

- **Reading Guides:** These should be completed and submitted by the next class meeting after they are assigned.
  - If you miss a class, you may still submit the reading guide within one week of that class meeting for 50% credit.
  - If you attended class but did not submit the guide on time, you may submit it within one week of the due date for 50% credit.
  - No credit will be given after one week.
- **Lesson Quizzes:** Late quizzes are not accepted. However, your two lowest quiz scores (including missed quizzes) will be dropped at the end of the semester.
- **XYZ Homework:** This system includes a "late pass" feature. You begin the semester with 10 late passes in your XYZ account, which you may apply without notifying me. Each late pass extends the due date of an assignment by **72 hours (3 days)**. Passes may be stacked; for example:
  - An assignment due Monday at 11:59 PM becomes due Thursday at 11:59 PM with one late pass. A second late pass moves the due date to Sunday at 11:59 PM.
  - Submitting an assignment 13 days late would require 4 late passes.

  If you need more than 10 late passes, simply let me know and I will add them to your account.
- **Written Work:** Written assignments will be accepted without penalty until the corresponding "Celebration of Knowledge" (exam/assessment) takes place. After that point, no credit will be awarded. This ensures you complete the work in time for it to most benefit your learning.
- **Extenuating Circumstances:** If you are unable to complete work on time due to illness, family emergency, or other serious circumstances, please reach out to me as soon as possible. I will do my best to accommodate you, though I cannot guarantee extensions in all cases.
- **Final Cut-Off:** No late work of any kind will be accepted after the scheduled Reading Day, December 10, at 11:59 PM. *No exceptions.*

Midterm Celebrations of Knowledge (30%): A Celebration of Knowledge is nothing more than an exam with a happier sounding name. There will be three midterm Celebrations of Knowledge throughout the semester. Each will be a paper-pencil, closed note, closed book exam that will be taken in-class. The use of calculators without a computer algebra system, such as most graphing calculators, will be allowed on a celebration of knowledge. A great idea would be to use AI to help you study for these exams, but you will not be allowed to use AI during the exams themselves.

Prior to each Celebration of Knowledge we will take a day to review and prepare, and you will be given a worksheet of review problems and the answers as PDF documents on Canvas. Completing these problems and turning in your work can count as up to 10 extra credit points towards your corresponding Celebration of Knowledge grade. Just like your homework, this assignment must be uploaded as a PDF file. Points will be based on the percentage of the assignment that you complete. For example, if you show work for 15% of the problems, you'll receive 1.5 extra points on your Celebration of Knowledge. However, if you complete 100% of the problems, you will receive the full 10 points possible added to your Celebration of Knowledge score.

Lastly, since this is an extra credit opportunity, THERE WILL BE NO EXTENSIONS GIVEN on this assignment. So, if you will not be in class on the exam day, you will still need to turn this assignment in by the due date given to receive any points.

Final (15%): The final will be a paper-pencil, closed note, closed book, comprehensive test. The same calculator policy applies to the final exam. It is both university and class policy that the final exam will NOT be rescheduled due to travel. Plan your travel arrangements around your exams. If you do not plan your own travel, please make a point to pass this information on to the people who purchase your airfare.

The final will be in person on **Saturday, Dec 13 at 4:00 pm** in our normal meeting place, Craton 100.

Final Exam Replacement Policy

If a student earns a higher percentage on the final exam than on one of the midterm celebrations of knowledge, then the lowest midterm exam score will be replaced by the final exam percentage (scaled to 100 points).

Here are some important notes about this policy:

- You must complete the final exam to qualify for this policy.
- If the final exam percentage is lower than your lowest exam score, no replacement will be made.
- This policy does not apply in cases of a violation of Academic Honesty.

Examples:

Example 1: Low Score

- Midterm Exam percentages: 80%, 85%, 75%
- Final Exam percentage: 90%
- New Midterm Exam percentages: 80%, 85%, 90%
- Final Exam percentage remains: 90%

Example 2: Missed Exam

- Midterm Exam percentages: 80%, 0%, 75%
- Final Exam percentage: 90%
- New Midterm Exam percentages: 80%, 90%, 75%
- Final Exam percentage remains: 90%

Missed Celebrations of Knowledge: Because the Final can replace the lowest Celebration of Knowledge score, no make-up opportunities will be offered for a single missed Celebration of Knowledge.

If a student misses more than one Celebration of Knowledge, it is their responsibility to contact me within 24 hours of the class period in which the assessment was given. In such cases, a make-up may be offered and a penalty of up to 20% may be applied. Any make-up must be scheduled within two business days of the original assessment; no further extensions will be granted. Failure to make timely contact or to provide sufficient evidence of a legitimate reason may result in a grade of zero.

If a student knows in advance that they will need to miss a Celebration of Knowledge due to an official university activity, they must notify me at least one week prior to the assessment in order to arrange an alternative time.

Core Learning Goals (CLG): Students completing Southern Virginia's core curriculum are expected to attain the following college-level competencies:

- *Careful Writing:* Ability to present arguments in clear written English with proper spelling, grammar, vocabulary, and transitions.
- *Critical Thinking:* Ability to separate a conclusion from its premises and evaluate how well the premises support the conclusion.

- *Analytic Reasoning:* Ability to evaluate a body of evidence and draw appropriate conclusions.

Core Values: Students demonstrate:

- *Scholarship* by coming prepared to class, focusing on activities in class, and meticulously completing homework assignments.
- *Discipleship* by being respectful of others and showing courtesy and concern for others and the learning environment.
- *Accountability* by faithfully attending class and coming on time, coming prepared, being aware of assignments given and completing them on time.
- *Enthusiasm* by participating in class discussions and completing in-class activities, showing interest in cultural material and discussions about mathematics in general.
- *Refinement* by going above and beyond in living the dress and grooming standards, their manner of speech and actions, cleaning up the classroom and following proper classroom etiquette. This includes not using cell phones (texting, etc.) or other electronic devices that may disrupt learning in the class.

Student Learning Outcomes (SLO) for the Mathematics Major: A student successfully completing this major will;

1. Competently work with the concepts of calculus, differential equations, geometry, analysis, algebra, and statistics. (Foundation-Formulate)
2. Learn to read, understand, analyze, and produce proofs at increasing depth. (Mathematical Proofs-Prove)
3. Use appropriate technology to enhance mathematical thinking and understanding, solve mathematical problems, and judge the reasonableness of results. (Technology-Solve)
4. Exhibit knowledge of formulating and solving problems, interpreting solutions, and modeling techniques central to applications of mathematics. (Mathematical Modeling -Model)
5. Demonstrate the ability to effectively communicate mathematics and other quantitative ideas in written and oral forms. (Communication-Communicate)

Course Goals: Through completion of the course, you should be able to do the following:

- Solve problems involving polynomial, rational, and logarithmic functions. (CLG 3)
- Solve problems involving linear and polynomial identities. (CLG 3)
- Analyze and solve a variety of application problems involving myriad subjects. (CLG 2, 3)

Title IX: Southern Virginia University is committed to providing an environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

Southern Virginia University, in compliance with Title IX, supports the academic success of pregnant students and students with pregnancy-related conditions (pregnancy, childbirth, termination of pregnancy, lactation, and all related medical conditions or recovery). Students may request reasonable, related modifications from the University by contacting the Title IX Coordinator at titleix@svu.edu.

Title IX of the Education Amendments of 1972 states that "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Title IX applies to all employees and students and covers discrimination in programs, admissions, and activities.

You can report any concerns to the Title IX Coordinator, Nathan Friesema (titleix@svu.edu), your professor, the Wellness Center, or any university administrator. Please be aware that all instructors are mandated reporters, so by law, we must disclose details relayed to us about any possible Title IX infraction to the University's Title IX coordinator.

Accommodations: Southern Virginia University is committed to providing a learning environment that accommodates and supports students with disabilities through accommodations. The Office of Accessibility Services oversees Academic Accommodations. Students with any type of physical, medical, psychological, or emotional disability may be eligible - through the Americans with Disabilities Act (ADA) - to receive accommodations to provide equal access to the academic settings. Any student seeking accommodations should contact the Office of Accessibility Services by emailing accessibility@svu.edu. Students are advised to take care of the necessary documentation and paperwork early in the semester. Accommodations are not made until the student follows the procedures outlined on the website, (https://catalog.svu.edu/policies/accessibility-and-accommodations) receives an official accommodation letter **AND** discusses it with their professors.

Academic Honesty: Following the code of conduct, (https://svu.edu/about/faith/code-of-conduct/), students are expected to "be honest in all things, obey the law and follow university policies, and not cheat, steal, or plagiarize." The objective of every faculty member is to empower students by providing opportunities for learning in the best environment possible. If there are questions about what is honest or dishonest behavior, please speak to your professor. Violations of academic honesty are reported to the Office of the Provost and appeals are handled through the student grievance process.

Wellness

We are located on the second floor of Main Hall, Room 234. We are open from 8am to 5pm Monday to Friday. To schedule an appointment with a therapist please Call or Text 540-261-8474, email counseling@svu.edu, or stop by in-person. We strive to accommodate same-day appointments for urgent needs whenever possible.

For Mental Health Emergencies After Hours

Please use any of the following options:

- **Call or text 988** — Suicide and Crisis Lifeline
- **1-855-222-2046** — Rockbridge Area Community Services Behavioral Health Hotline
- **540-261-4911** — SVU Campus Security
- **Visit the ER** — Carilion Rockbridge Community Hospital
  1 Health Circle, Lexington, VA 24450
- **Call 911**