Syllabus
Math 1233-101: College Algebra
Fall 2024

Section Information

Instructor

Instructor: Dr. Sarah Cobb (she/her)
Office: Pierce Hall 120
Office phone: (940) 397-4441
E-mail: sarah.cobb@msutexas.edu
Drop-in Office hours:
- Monday: 1:00-1:50 PM
- Tuesday: 1:00-1:50 PM
- Thursday: 1:00—1:50 PM
- Friday: 9:30—11:20 AM

Office hours also available by appointment

Schedule

Class meetings: MWF, 8:00—8:50 AM, Bolin 311

Unit Exams: September 30, October 28, December 2, during class time

Final Exam: Wednesday, December 11, 1:00—3:00 PM, location to be announced

Catalog information

Course Description

In-depth study of polynomials, rational, radical, exponential, and logarithmic functions, including applications for these functions and methods for solving related equations and inequalities. Additional topics, such as systems of linear equations, may be included. (This course is designed for students planning to take additional mathematics.)

Prerequisites

Prerequisite(s): Math TSIA2 Assessment score of 950, Math TSIA2 Diagnostic score of 6, MATH 1003 with a grade of C or better, math TSI Assessment score of 350, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.

Course Materials

Videos and Guided Notebook

The primary written resource for this class is the College Algebra Guided Notebook by Sarah Cobb and Marcos Lopez, with the accompanying video lectures. The Guided Notebook will be distributed on paper in class and is available digitally through D2L.

Additional materials needed will be posted or linked through D2L.

Online Homework System

Homework for this class will be completed through the MyOpenMath system, accessed at www.myopenmath.com. You can access MyOpenMath on your own computer or in campus labs.

Note: MyOpenMath does not comply with TX-RAMP cybersecurity certification requirements. MSU cannot guarantee that information entered on MyOpenMath will be secure. The only information provided to MyOpenMath is your name and email address. Students with privacy concerns can contact Dr. Cobb about alternate arrangements.

Instructions for setting up a MyOpenMath account will be posted in D2L.

Open Educational Resources

All instructional materials for this course are provided at no cost to students thanks to a grant from the Texas Higher Education Coordinating Board promoting the development of open educational resources for use in Texas colleges and universities.

Calculators

You will need a scientific calculator for this class that will compute radicals, exponents, and logarithms. Make sure that you have a calculator, know how to use it, and make a habit of bringing it to class daily.

Active Learning

Philosophy

This course will built around active learning in the classroom. This means that you will be engaged in reasoning, problem solving, and mathematical communication throughout the class, rather than listening to a lecture. Studies have consistently shown that students benefit from active learning practices (a few links are provided below). I will spend a very small amount of time talking to the whole class and a lot more time working with small groups.

Covering a typical content section

Before class, you will watch a video (linked from D2L) and fill out an associated guided note sheet. Make sure you bring the notes to class as a reference—it will help you work effectively in class, as well as counting towards your participation and preparation grade.

In class, you will work with 2-3 classmates on a series of exercises designed to deepen your understanding of the concepts. Groups will be assigned and will change every 2-3 weeks.

The exercises are divided into a basic set and a challenge set. Try to finish the basic set and spend time on at least one interesting challenge question, but don't worry too much about working fast.

After class, there will be an online homework set for additional practice on the concept. It will be due a week or so after the class meeting for the section.

Three unit tests and one cumulative final will provide the largest part of your grade for the course. The problems on these exams will be similar to class and homework problems.

Guidelines for Group Work

- ***Treat every member of your group politely and respectfully at all times.**
- Each group should use only one piece of chalk— one person should be writing at a time.
- Everyone in the group should participate. One good way to do this is to choose a scribe for each problem or part of a problem and pass the chalk to someone else when it's done.
- You can use your guided notes, but no other resources. The questions are structured so that you should be able to make progress on them with the information in the notes.
- Make sure everyone in the group understands each step.
- If you have a question, ask your group members first.
- If someone asks a question, pause to answer it carefully— this helps the person (or people) with the question and also the person (or people) explaining.
- If no one in your group knows the answer, ask the instructor.
- Work the first set of problems in order, then move on to the additional problems in whatever order you like.

Some Resources on the Value of Active Learning

Conference Board of the Mathematical Sciences [Statement on Active Learning](#)

[What does Active Learning Mean for Mathematics?](#) from Notices of the American Mathematical Society.

[Active Learning Increases Student Performance in Science, Engineering, and Mathematics,](#) Psychological and Cognitive Sciences.

Coursework and Grading

Grading

Your course grade will be computed based on the following categories:

Category	Points
Participation and Preparation	40
Quizzes	60
Homework	100
Unit Exams (3)	300
Final Exam	200
Total Points	700

Your final letter grade will be based on the total number of points earned. The table below shows the number of points needed to earn each letter grade.

Grade	Points Needed
A	At least 630
B	At least 560
C	At least 490
D	At least 420
F	Less than 420

Participation

Active participation is an essential part of this class. To achieve full points in participation you must attend class daily; arrive on time and stay until the end; arrive prepared with appropriate supplies (pen/pencil, prepared notes, calculator); complete assigned preparation for class (this will usually involve watching videos and filling out guided notes); and participate actively in class.

Homework

Homework will be assigned through the MyOpenMath system, which can be accessed at www.myopenmath.com. Instructions for setting up MyOpenMath are available on D2L. Homework will generally be assigned after each class meeting and be due at 7:00 AM on Friday of the following week.

You will have three "late passes" for homework assignments. Activating a late pass on an assignment will allow you to complete it up to 48 hours late for full credit. It's probably a good idea to save these for illness or emergencies.

Advice on approaching homework:
Even though your homework will be online, you are encouraged to write up your homework solutions. As you are writing up these problems, describe the steps our loud to yourself. Does it make sense? Are you confident on how you arrived at that answer? Make sure you start your homework several days before the deadline so that you have time to consult with your classmates or your instructor if you have trouble with certain problems. Ideally, you should start working on each day's assignment after class on the day it becomes available to help you prepare for the next class.

You are allowed and encouraged to work with classmates on your homework assignments. Some problems are randomized and will not match exactly between classmates. Everyone working together should be able to work the problems on their own when the assignment is finished.

The goal of the homework is to help you learn the material thoroughly—most immediately, so that you can be successful on course exams. You should continue working the problems until you know how to do each type of problem without referring to notes or examples, as you would need to on an exam.

Quizzes

Short quizzes will be given at the beginning of class 1-2 times per week. I will usually not announce quizzes in advance. You must arrive in class on time in order to take the quiz. Quizzes will generally cover material from the videos assigned for the day; notes and calculators will often be allowed. No make-up quizzes will be given for any reason, but your two lowest quiz scores from the semester will be dropped from your grade.

Tests

The unit exams for this class are September 30, October 28, December 2, during class time.

If you must miss an exam, please let me know at least one week ahead of the test date and arrange to take the test early. In the case of unexpected and unavoidable absences (such as hospitalization), you must let me know on the day of the test and provide documentation.

Final Exam

The final exam for this course is Wednesday, December 11, 1:00—3:00 PM. It cannot be taken early or late for anything except an emergency. Please consult the finals schedule before planning end-of-semester travel, as scheduled travel is not an emergency and you will not be able to reschedule the exam.

Course Policies

Attendance

You are expected to attend every class, in person, if at all possible. This includes arriving on time; staying to the end; being prepared; participating in class; and behaving respectfully. If you must miss class, please consult a classmate to find out what you missed.

Students who miss more than six classes or portions of classes for reasons other than university-excused absences may be dropped from the course with a grade of F.

I do understand that life is complicated, and that class attendance is not totally under your control. Attending class should be a high priority, but it can't (and shouldn't) be your only priority. If there are circumstances that cause you to miss a significant amount of class, please communicate promptly with me about it and I will work with you on a plan to stay caught up on course material.

Learning Environment

I am committed to providing an environment that promotes learning for all students. It is important to me that this class is a welcoming, inclusive, and accessible space for all students. I am available and willing to address your issues and concerns as they arise.

Much of the learning in this class will involve interaction with your peers. In order for that to be effective, we must all conduct ourselves with respect, generosity, and openness.

Classroom Behavior

Respectful behavior in the classroom is required. Any student who is disruptive will be asked to leave class. As much as possible, please avoid leaving or entering the room during class. Make sure all electronic devices are silenced. Use of cell phones in class is not allowed.

Electronic Devices

Use of computers is not allowed in the classroom. This includes laptops, cell phones, tablets, and other similar devices. (Calculators are allowed.) Students using such devices may be asked to leave class. If a cell phone or similar device is visible or audible during an exam, you may receive a zero on that exam.

If this policy presents a serious problem, please let me know; exceptions may be made in special circumstances.

Academic Misconduct

Any incident in which a student submits work for grading that does not reflect their own effort is considered academic dishonesty. This includes using sources (by paraphrase or direct quotation) without proper attribution; collaborating on work where collaboration is not authorized; use of sources on an assignment or test where those sources are not authorized; and turning in work completed by another person.

Cheating on any work in this course will result in no credit for that work. Egregious or repeated incidents will result in more serious consequences, such as a failing grade in the course or dismissal from your academic program. All incidents of academic misconduct will be reported as specified in your student handbook.

Student Handbook

Make sure you are familiar with university policies as described in the student handbook. This course will abide by all university policies.

Changes

Some portions of this syllabus may alter during the semester. When possible, I will announce changes in class as well as sending an email. You are responsible for knowing everything I announce in class as well as everything I email to your official university email address. If you miss class, make sure you talk to someone who was there.

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program and to regularly check posted information. D2L provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. Downloading the Brightspace Pulse app is also recommended. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Office Hours

Office hours are time that I have set aside to answer questions about the course or course material. I am happy to answer questions about homework problems, quizzes and tests, study practices, grades, and other topics. If you are unable to attend scheduled office hours, you can email me (sarah.cobb@msutexas.edu) to set up an appointment at another time.

Communicating with Me

The best way to reach me is by email (sarah.cobb@msutexas.edu). I will generally respond to email within 24 to 48 hours. I will be in my office during office hours each week and often at other times; feel free to stop by. Any communication not in writing or by email should be considered unofficial.

Services for Students With Disabilities

MSU is committed to providing reasonable accommodations to allow students with disabilities to participate fully in its academic and campus life. Any student who may require special arrangements in order to meet the course requirements should contact me as soon as possible to make necessary arrangements. Students must present appropriate verification provided by Disability Support Services. The best time to present this documentation in private is during office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Disability Support Services located in Clark Student Center, Room 168 or call 940-397-4140.

Final Note

College Algebra is a difficult class: we will cover a lot of topics, and they build on each other. The course moves quickly in order to cover all of the content that you need to know in order to be successful when you move on to trigonometry, calculus, or statistics. In addition to mastering new content, you will be challenged to think abstractly, communicate mathematical ideas clearly, and solve problems in unusual contexts.

The material and the course are demanding, but they are essential to lay a foundation for future mathematical success– dedicate yourself to daily progress and work with your professor to stay on track.

However:

Although I expect a high level of engagement from students, I recognize the challenges of this class. Most of the material will come up again in future classes, and it will require multiple exposures to fully grasp the underlying logic and motivation. College Algebra has a high potential to make students feel lost, frustrated, insecure, behind, and incapable. These are natural and normal feelings.

*DON'T GIVE UP!

Please talk to me about your concerns should you feel overwhelmed. We can chart a way forward.