Course Syllabus: Precalculus

Math 1534 Section 201 Spring 2026

Contact Information

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Course Description

Applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic and trigonometric functions. This course is intended for students planning to take MATH 1634.

Textbook & Instructional Materials

Required:

We will be using the online homework system ALEKS. A link to ALEKS is accessible through D2L. A short ALEKS student registration video is within D2L. The video will guide you through the steps of registering to use the ALEKS online platform. Within the online ALEKS platform, you will have access to the textbook for this course: Precalculus, 2nd Ed. (McGraw-Hill) by Miller and Gerken. A physical textbook is not required.

Required digital materials for this course are part of the Courseware Access and Affordability Program at MSU Texas. Students are charged for required course materials on their student account with the Business Office. Any students who wish to opt-out of the Program and purchase the required course materials on their own must follow the opt-out instructions which are sent to students' official my.msutexas.edu email address after the first day of class. Please contact the MSU Bookstore if you have any questions about the opt-out process.

Calculator Requirement: ***You are required to have a scientific calculator (such as a TI30XS) and bring it to class every day.** However, graphing calculators and certain scientific calculators will not be allowed to be used on assessments (quizzes or exams). Dr. Knox reserves the right to not allow a calculator for some assessments. When a calculator is allowed for an assessment, two approved calculators are the TI30XIIS and the TI30XS MultiView. Any other calculator will need to be approved by Dr. Knox before a

student is allowed to use it on an assessment. Dr. Knox may need two weekdays to determine whether or not a particular calculator will be allowed to be used on an assessment. There are calculators that will work for this class in terms of doing homework or class group work that will not be allowed to be used on exams and quizzes. Two such calculators are the TI-36XPro and the Casio fx 991, which solve certain polynomial equations and/or provides exact irrational values of trigonometric functions of special angles. Any student who attempts to use a non-approved calculator on a quiz or exam may receive a zero on the quiz or exam. Further, additional penalties, as outlined under the Academic Misconduct Policy, may apply.

Desire-to-Learn (D2L)

You will access ALEKS through the MSU D2L program. You can log into D2L through the MSU Homepage. On D2L Dr. Knox will post any announcements and reminders that she feels will be helpful as we go through the semester. Dr. Knox will also post grades within D2L.

Attendance Policy

Attendance will be taken at the beginning of every class. Any student who is late or who leaves early may be counted as absent. This will result in a zero on any quiz or other assignment for the day. ***Any student who misses seven or more classes may be dropped from the course. Any student who fails to attend a class during the first week of classes may be dropped from the course.**

If you miss class, it is your responsibility to

1. get notes from another student for the day(s) you missed, and
2. see Dr. Knox before the next class for any handouts from the day(s) you missed.

Course Modality

This class will be taught using a flipped class structure as described below. Generally, in preparation for class, students will complete, within ALEKS, pre-class homework assignments over sections of the textbook. These pre-class homework assignments will contain many short videos over the major topics covered in the course and the textbook. While watching the videos, ***students are to take detailed notes and bring their completed notes to class with them.** The pre-class homework assignments may also contain problems for students to work after watching some of the videos. The purpose for the pre-class homework is to provide students initial instruction over course topics. After any lecture/discussion led by Dr. Knox, students will work in small groups on problem sets in class to sharpen their understanding, and their peers understanding, of course topics covered in the pre-class assignment. The small group problems sets are also used as a scaffold to help students' extend their knowledge beyond what they obtained from the videos in the pre-class assignment. Working in small groups with class peers provides students with a collaborative and active learning environment. Student collaboration is an

important part of this teaching method. Collaboration allows students to help each other, as well as help themselves, to develop a deeper understanding of course content. When you can explain a solution process to someone else in a way that helps that person understand a concept, you are deepening (or sometimes even challenging) your own understanding of the concept. An active learning environment is one that engages students in the learning process and encourage more complex thought. While students work in assigned groups, Dr. Knox will walk around the classroom and interact with student groups to aid in the learning process. Dr. Knox's interactions may involve answering questions of the group, as well as posing questions to the group. Adaptive homework modules in ALEKS will be assigned over the content focused on during each week of the semester. Dr. Knox reserves the right to alter the course modality at any time.

Grading

Table 1: Points allocated to each assignment

Assignments	percentage
Quizzes	10%
Preclass assignments, in class group work, ALEKS homework	5%
Exams (3 at 21% each)	63%
Final Exam	22%
Total	100%

Table 2: Grading Scale for Final Grade

Grade
A 90% and above
B 80-89%
C 70-79%
D 60-69%
F below 60%

Homework

Working problems in the weekly homework modules is how one learns the Precalculus content that is needed for learning Calculus. Students in this course should be planning to talk Calculus in the near future. This course is to ensure you have the background needed to be successful, with continued work and effort on your part, to be successful in learning Calculus.

You should work on the weekly homework modules over a course of several days each week. Homework modules are not intended to be completed in one or two settings. When you seek help from me (which I hope you will do whenever you do not fully understand how to solve a problem type), bring with you your written work with your best attempt or attempts at solving the problem in which you are seeking help.

***Any student that is not spending adequate time working problems from the weekly homework modules may be instructor dropped with a grade of F or WF.** Dr. Knox will provide a warning to any student that is in danger of being dropped from the class for not spending adequate time working problems within the weekly homework modules. As a reminder, students should expect to need to spend 8 to 12 hours per week outside of class working on learning the content covered in this course. Students with a sufficient amount of time logged in ALEKS but an insufficient amount of learned topics may be required to schedule time with a tutor in the TASP office in order to remain enrolled in the class.

***Any student that fails to complete, including taking adequate notes, more than five pre-class assignments may be instructor dropped from the class with a grade of F or WF.**

Quizzes

At the end of the semester, your grade will be calculated with and without your quizzes. The higher grade will be given to you. ***Makeup quizzes will not be given for any reason.** The exception: if a 0 quiz average is given for reasons of academic dishonesty, then your grade will be calculated with that 0.

Exam Dates

The tentative exam dates are as follows:

- Exam 1: Thursday, February 26, 2026
- Exam 2: Tuesday, March 31, 2026
- Exam 3: Thursday, April 30, 2026
- Final Exam: Thursday, May 14, 2026, 10:30am-12:30pm

***If an exam is missed, every effort must be made by the student to notify Dr. Knox in a reasonable amount of time before the exam.**
Whether you call Dr. Knox or email her when you miss an exam, be sure to leave your name and phone number in your message so that she can call you back.

Dr. Knox's late policy does not apply to test days—it is better to be a few minutes late to a test than to not show up at all.

Some exams (or portions of an exam) will be required to be completed without a calculator. When a calculator is allowed, it must be an approved calculator. See the calculator requirement section of this syllabus.

Cell Phones and Other Electronics Policy

Please turn cell phones off or place on silent prior to the beginning of class. All cell phones must be placed face down on the desk/table in front of you during class. Remove smart watches during class. Cell phones/earbuds/smart watches/smart glasses etc. are not to be used during class. Violation of this policy during class may result in the student being counted absent, and any

graded work turned in on that day will receive a grade of zero. Continued violation of the electronics policy may result in a referral to the Dean of Students and/or the student may be withdrawn from the class by the instructor. Use of a cell phone/earbuds/smart watch/other unauthorized electronic device during a test or quiz will result in one of the penalties listed under the academic misconduct policy given in this syllabus.

Academic Misconduct Policy

All work that you do that contributes to your course grade must be your own work. Any evidence that you submitted work that is not your own is considered an act of academic dishonesty. An act of academic dishonesty will be reported to the university and will result in one of the following academic sanctions:

- Receiving a 0 on the homework assignment, quiz, or exam.
- Receiving a 0 for the entire quiz grade for the semester or the entire preclass/group work/homework score for the semester. if a 0 quiz average is given for reasons of academic dishonesty, then your grade will be calculated with that 0 (quiz average will not be dropped).
- Receiving an F in MATH 1534.
- Receiving an F in MATH 1534 that will remain permanently on your transcript and within your MSU GPA.

On homework, you may get assistance from others, but you are responsible for understanding what you submit. Copying solutions from online resources or using an app/AI to complete your homework is considered cheating. The university's academic dishonesty policy can be found in the student handbook.

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Student Wellness Center. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to Disability Support Services

College Policies and Student Handbook

Student Handbook Refer to: Student Handbook

Campus Carry Rules/Policies Refer to: Campus Carry Rules and Policies

Campus Carry
Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License-to-carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit Campus Carry.

Active Shooter
The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by the MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit MSUReady – Active Shooter. Students are encouraged to watch the video entitled "*Run. Hide. Fight.*" which may be electronically accessed via the University police department's webpage: *"Run. Hide. Fight."*

*Assessment of Core Objectives***:** Samples of students' work from embedded final exam questions will be used in the assessment of critical thinking, communications skills and empirical and quantitative skills.

When you need help with this course, where can you go?

1. To your professor's office: You can attend office hours hosted by Dr. Knox. When you do so, you will get one-on-one help from the instructor who is teaching the course you are taking. You should have with you both your notes and all of the related work that you have done over the topics you are seeking help with.
2. The *Tutoring and Academic Support Program* (*TASP*), located in Moffett Library, offers free additional tutoring in math as well as other courses. You can find out more about their services by visiting their office or searching *TASP* on the MSU website. Please see their website for specific information on tutoring for Precalculus.

*__Notice:__ Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Topics

We will be covering topics from the following list.

- Factoring
- Exponents and radicals
- Functions and relations
- Algebra of functions
- Transformations of functions
- Inverse functions
- Complex numbers
- Properties, graphs, equations, inequalities, and applications of the following types of functions
    - Polynomial
    - Rational
    - Radical
    - Exponential
    - Logarithmic
    - Trigonometric
- Angles
- Inverse trigonometric functions
- Trigonometric identities
- Applications of trigonometric functions (such as right triangles, law of sines, and law of cosines)
- Polar coordinates
- Parametric equations
- Conic sections
- Vectors