

PRECALCULUS

MATH 2312.001 | SPRING 2025

Course Description

This course will help you to succeed in Calculus and all of your future mathematics courses. Roughly half of Calculus I students fail. However, students that take this class are much, much more likely to pass. Most of those students fail because they do not have the background skills needed to succeed. You will learn or review topics from college algebra, trigonometry and analytical geometry which are critical for passing Calculus. The topics covered will include algebraic functions and their graphs, exponential and logarithmic functions, trigonometric functions and identities, two- and three-dimensional analytical geometry. Please understand that if you have already taken MATH 1316, then you will not receive credit for this course. The prerequisite for this course is an appropriate score on ACT, SAT, STAAR, TSI or special permission.

Instructor: Dr. Deborah Koslover

Office: RBN 4010

Email: dkoslover@uttyler.edu

Classroom: RBN 4027

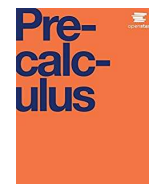
Meeting Time MWF 11:15 AM -12:10 PM

Office Hours: MW 1:15 – 2:15 PM,
TTH 10:10-11:00 AM and 1:15 – 2 PM
or by appointment.

Textbook

We will not be using a textbook in this class. All information you need will be presented in class. You are not required to obtain any book.

However, if you would be more comfortable with a textbook there is one which is available for free online. You can get a free pdf copy by going <https://openstax.org/details/books/precalculus> . Or you can get a free Kindle copy here https://www.amazon.com/Precalculus-Jay-Abramson-ebook/dp/B075FC37CD/ref=sr_1_3?dchild=1&keywords=pPRECALCULUS&qid=1629150638&sr=8-3 Or you can buy a dead tree version for about \$40 at the Amazon link above.



Website

You will be using Canvas. Go to www.uttyler.edu/canvas to log into Canvas using your regular patriots account. If you have enrolled in the course, you should have access to the website. You will find important documents, grades, lecture notes, and announcements on Canvas.



Attendance is mandatory and attendance records will be kept. Notify Dr. Koslover in advance if you must miss a class, be late for a class or leave early.

(Official University Policy: Class attendance is the responsibility of the student. When a student has a legitimate absence, the instructor may permit the student to complete missed assignments. In many cases class participation is a significant measure of performance, and non-attendance may adversely affect a student's grade. When a student's absences become excessive, the instructor may recommend that the student initiate a withdrawal.)

Learning Outcomes

At the conclusion of this course, you will be able to

1. Reason analytically to solve algebraic problems such as finding the solutions to polynomial, rational, exponential, logarithmic, and trigonometric equations, as well as finding inverse functions.
2. Represent trigonometric functions by drawing relevant pictures on the unit circle, by writing the correct trigonometric definitions, and by verbal description.
3. Demonstrate a critical understanding of functions by graphing and analyzing functions, evaluating functions at specific real numbers and at variable values, computing new functions from old functions through algebraic operations, and applying known theory such as the Factor Theorem to factor polynomials and find their zeroes.
4. Calculate the values of trigonometric functions based on right-triangular and circular definitions.
5. Solve right triangles given appropriate information about sides and angles.
6. Prove the validity of trigonometric identities.

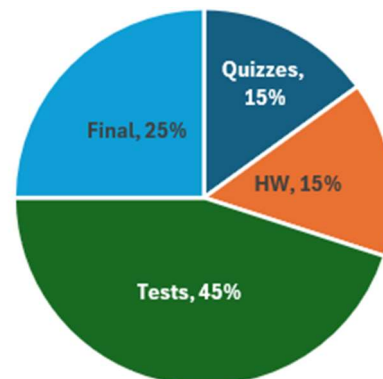
Course Evaluation

At the end of the semester, you will find your final grade on my.uttyler.edu. It will also be posted on Canvas.

A final course grade of

- 90% is guaranteed to be at least an A
- 80% is guaranteed to be at least a B
- 70% is guaranteed to be at least a C
- 60% is guaranteed to be at least a D.

All grades below 60% will be F.



The Plan

Homework

(15%) Homework will be assigned each class period via the online platform WebWork. You can access the homework assignments at the following link https://webwork-hosting.runestone.academy/webwork2/uttyler-koslover-math2312_004-fall2024 Your WebWork username has been emailed to you. Your temporary WebWork password is uttyler. Please change the password immediately upon logging into WebWork for the first time. The login is case sensitive. For example, if your user name and password are Lead and uttyler, you will not be able to successfully login if you type lead and UTtyler.

In general, a new homework assignment will become available on WebWork after each class. It will be due Thursday night (by 5AM Friday morning) of the following week. The WebWork system provides you with instant feedback on your answers, as well as three attempts to complete most problems. You should use this to your advantage. However, you will not be able to submit solutions after the due date. When computing your final homework grade, I will use your total score on all the WebWork problems. For example, if there are a total of 150 problems throughout the semester, and you successfully complete 120 of them, your homework grade will be 80%. Please let me know as soon as possible if you suspect a problem with WebWorks.

On occasion, an on-paper problem may be assigned. They will need to be scanned and posted on Canvas

Striving for success without hard work is like trying to harvest where you haven't planted.
_David Bly

Q₁₀ U₁ I₁ Z₁₀ Z₁₀ E₁ S₁ (15%): There will be seven quizzes worth. Please see the calendar at the end of the syllabus for dates. The quizzes will be easier than the tests. Your lowest quiz score will be dropped. If you have 3 or fewer unexcused absences, your second lowest quiz grade will be dropped. Athletes, please plan to take your quizzes before your trips.

It's not that I'm so smart, it's just that I stay with problems longer. _Albert Einstein

TESTS (15% each) and FINAL EXAM (25%): There will be three tests, held on Fridays, and a final exam. These exams will test your knowledge of the material taught in the class and practiced on the homework. The final exam will be comprehensive, but will emphasize material in the final weeks of the course. No tests will be dropped. See Important Dates below for the schedule.

Success is dependent on effort. _Sophocles

Final Exam: Monday, April 28, 10:15 AM – 12:15 PM

Please don't plan your travel to start before the date the final exam is scheduled!



**** * * Special Homework Assignment * * ****

Attendance will be taken each day. Every class day, except the first day of class and test days, I will assign two to three students to remind me to take attendance and to make sure the date is marked on the attendance sheet. If you or your attendance partners make sure that I pass around the attendance sheet during the first 10 minutes of class, and you are in attendance that day, then you will receive 5 points toward your homework grade. You may trade attendance days with other students, but you must both notify me that the change has been made.

Make-ups

Make-ups for **documented** absences that are **required** as part of a UT Tyler obligation (e.g. athletes participating in an event, participating in a debate contest, etc.) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted only in extreme cases such as hospitalization and at the sole discretion of the instructor.

Make-ups will be allowed for the following excused absences.

- 1) Illnesses, with a doctor's note, no exceptions.
- 2) Your child's illness, with a doctor's note.
- 3) Court appearances, including citizenship court, with documentation
- 4) Weddings, funerals or military advancement with documentation **and** a photograph showing that you attended the event.

Doctor's notes must be dated either before you miss the class or within 2 days after you missed the class, unless you or your child are hospitalized. In case of hospitalization, bring evidence of hospitalization.

Make-ups for test must be taken within 3 days after returning to class except for lengthy illnesses or hospitalizations.

Other Details

Calculator Policy: Calculators will not be allowed on quizzes and at least parts of some tests. You will need to be proficient in fractions and basic computations. Some homework problems will need to be done without calculators. When allowed, you may use scientific, non-graphing calculators. You may not use your phone. However, all work must be shown. Many different types will work well, but the TI-30X IIS is recommended. I will have some calculators available when they are allowed. However, I do not have enough for the entire class.

OTHER HELP

Supplemental Instruction (SI):

Our SI leader will be Aaliyah Trout

Meetings TBA

[SI Session Schedule \(uttyler.edu\)](https://uttyler.edu)

Math Learning Center (MLC): RBN 4021. Free walk-in tutoring is available. A schedule will be posted on Canvas. The MLC will open the second week through the last week of classes. Self-enrollment <https://uttyler.instructure.com/enroll/GK9MNC>

PASS Center: Free individual tutoring. [UT Tyler Supplemental Instruction](#) Starting 1/20.

Office Hours: Hours, posted on first page of the syllabus, are held in my office RBN 4010. This is for clarification about topics from class, help with homework that you have already attempted and discussion of any personal matters.

AI: AI is not permitted in this course at all. I expect that all work submitted by students for this course to be their own. I have carefully designed all assignments and class activities to support your learning. Doing your own work, without human or artificial intelligence assistance, is best for your efforts in mastering course learning objectives. For this course, I expressly forbid using ChatGPT or any other artificial intelligence (AI) tools for any stages of the work process, including brainstorming. Deviations from these guidelines will be considered a violation of UT Tyler's Honor Code and academic honesty values.

Request: I will ask many questions during class. I don't expect you to know the answers. I want you to try to figure them out during class. You will not be insulted or humiliated for getting incorrect answers, because you are not expected to know them. If you do know answers, from other classes or your own reading, please only answer no more than one question during class. Regularly answer questions during class when you already know the answer in advance will not help your grade, will harm those who are trying to learn and will annoy me.

Cell phones and other electronic devices: Please set your cell phones to silent mode. If you are expecting an emergency call, please notify the professor in advance, sit near the door, and answer the phone outside. You will not be allowed to wear electronic devices (except hearing aids) during an exam. During tests, cell phones must be turned off and placed in sight on your desk.

Calendar

JANUARY			FEBRUARY			MARCH			APRIL		
MON	WED	FRI	MON	WED	FRI	MON	WED	FRI	MON	WED	FRI
13	15	17	3	5	7	3	5	7		2	4
First Day			10	12	14	10	12	14	7	9	11
20	22	24						EC			Test 3
MLK Day		Quiz 1	17	19	21	17	19	21	14	16	18
27	29	31			Quiz 3	Spring Break					
Census Day		Quiz 2	24	26	28	24	26	28	21	23	25
Homework Due Thur Night (Wed morning by 5 AM)					Quiz 4			Quiz 5			Quiz 7
						31			28	30	2
						Drop Day			Final Exam		

Extra Credit
5 Points on HW
For attendance 3/14

Final Exam
10:15AM-12:15 PM