MATH 2312 – Precalculus
Spring 2022

Professor: Dr. David Milan   **Office**: RBN 4006

Office Hours: WF 10:30-11:30am, TR 1-2pm, or by appointment

Email: dmilan@uttyler.edu   **Office Phone**: 903-565-5839 (email is best)

Web: class page on canvas   **Class Meeting Time**:   002: MWF 8-8:55am
                                                            003: MWF 1:25-2:20pm

Required Text: *Precalculus* from OpenStax (Print ISBN: 1938168348; Digital ISBN: 1947172069). This is an open-access textbook, meaning it is freely available at the following link: www.openstax.org/details/precalculus. You can read the book online, or download PDF, iBooks, or Kindle versions of it. If you want a print copy, you can purchase one from Amazon for about $40 (paperback) or $58 (hardcover).

Prerequisites: Appropriate score on ACT, SAT, or TSI.

Course Description: This course is a survey of college algebra, trigonometry, and analytic geometry to prepare students for calculus. Topics include algebraic functions and their graphs, exponential and logarithmic functions, trigonometric functions and identities, and two- and three-dimensional analytic geometry.

Student Learning Outcomes:
Upon completion of this course, students should be able to do the following:

- Develop analytical reasoning to solve algebraic problems such as finding the solutions to polynomial, rational, exponential, logarithmic, and trigonometric equations, as well as finding inverse functions.
- Represent trigonometric functions by drawing relevant pictures on the unit circle, by writing the correct trigonometric definitions, and by verbal description.
- 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.
- Calculate the values of trigonometric functions based on right-triangular and circular definitions.
- Solve right triangles given appropriate information about sides and angles.
- Prove the validity of trigonometric identities.

Summary of grading policy: Your grade will be based on:

Quizzes: 12%	Three Tests: 66%	Final Exam: 22%

Tests and Final Exam: There will be 3 tests and a comprehensive final exam. A preliminary list of the test dates is given below. At least one week advanced notice of any change in test dates will be given.

Important Dates:
Jan. 17: Martin Luther King Jr. Holiday
Jan. 24: Census date: date to withdraw without penalty and grade replacement deadline.
March 7 - 11: Spring Break
March 28: Last day to withdraw.

Approximate Daily Schedule

		Monday	**Wednesday**	**Friday**
1	Jan. 10 – Jan. 14	1.1 / 1.2	1.2 / 1.3	1.3
2	Jan. 17 – Jan. 21	MLK	1.4	1.5
3	Jan. 24 – Jan. 28	1.6 / 1.7	2.1	Test 1
4	Jan. 31 – Feb. 4	2.2	2.2	2.3
5	Feb. 7 – Feb. 11	3.1	3.2	3.3
6	Feb. 14 – Feb. 18	3.4	3.5 / 3.6	3.7
7	Feb. 21 – Feb. 25	3.8	4.1 / 4.2	Test 2
8	Feb. 28 – Mar. 4	4.3	4.4	4.5
9	Mar. 7 – Mar. 11	Spring Break		
10	Mar. 14 – Mar. 18	4.6	5.1	5.2
11	Mar. 21 – Mar. 25	5.3	5.4	6.1
12	Mar. 28 – Apr. 1	6.2	6.3	7.1
13	Apr. 4 – Apr. 8	7.2	7.3	Test 3
	Apr. 11 – Apr. 15	7.4	7.5	7.6
14	Apr. 18 – Apr. 22	8.1	8.2	Review
15	Apr. 25 – Apr. 29			

Make-ups: Make-ups for **documented** absences **required** as part of a UT Tyler obligation or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week is required.

Calculator Policy: No calculators will be allowed on quizzes or tests. Occasionally, you might want to use Mathematica or a calculator on the homework.

University Policies:
See http://www.uttyler.edu/academicaffairs/files/syllabuspolicies.pdf for a list of important University policies: student rights and responsibilities, grade replacement and forgiveness, state-mandated course drop policy, disability services, student absence due to religious observance or university sponsored events, and social security and FERPA.