

MATH 2312.030 Precalculus
Spring 2022
Mon/Wed/Fri 9:00-9:50 am



Instructor: Ms. Cynthia Bishop

Email: cynthia.bishop@angelo.edu

Phone: (325) 486-5428

Office: MCS 220B

Office Hours:

Monday/Wednesday/Friday: 10:00 – 11:00 am and 1:00 – 2:00 pm

Tuesday/Thursday: 9:00 – 11:00 am

And by appointment

Note: Office hours can be attended in person or virtually

Course Information

Course Description

Review of algebra, solving equations and inequalities, study of functions and inverse functions, and lines and planes in space.

Prerequisite and Co-requisite Courses

Math 1314 or a suitable score on a placement exam

Student Learning Outcomes

- 1. The students will demonstrate an understanding of factual knowledge including the mathematical notation and terminology used in this course.** Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in precalculus pertaining to the real numbers; exponents and radicals; polynomials, factoring, and rational expressions; equations and inequalities; functions; polynomial and rational functions; inverse functions; exponential and logarithmic functions; and graphs and their transformations.
- 2. The students will describe the fundamental principles including the mathematical rules and theorems arising from the concepts covered in this course.** Students will identify and apply the laws and formulas that result directly from the definitions; for example, rules of exponents, exponential and logarithmic

properties, the quadratic formula, slope and formulas for the equations of lines, the Intermediate Value Theorem, and the limit laws.

- 3. The students will apply course material using techniques and procedures covered in this course to solve problems.** Students will utilize the facts, formulas, and the techniques learned in this course to simplify algebraic expressions; graph functions; and solve equations and systems of equations.
- 4. The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields.** Students will acquire a level of proficiency in the fundamental concepts and applications in precalculus necessary for success in calculus.

Course Content

Textbook: *Precalculus: Mathematics for Calculus*, 7th Edition, by Stewart, Redlin, and Watson. The following chapters including the particular sections listed are covered.

- 1. Fundamentals:** Exponents and Radicals; Algebraic Expressions; Rational Expressions; Equations; Inequalities; The Coordinate Plane; Graphs of Equations; Circles; Lines.
- 2. Functions:** Functions; Graphs of Functions; Getting Information from the Graph of a Function; Average Rate of Change; Linear Functions; Transformation of Functions; Combining Functions; One-to-one Functions and Their Inverse.
- 3. Polynomials and Rational Functions:** Quadratic Functions; Polynomial Functions; Dividing Polynomials; Rational Functions.
- 4. Exponential, and Logarithmic Functions:** Exponential Functions; The Natural Exponential Function; Logarithmic Functions; Laws of Logarithms; Exponential and Logarithmic Equations.
- 13. Limits: A Preview of Calculus:** Finding Limits Numerically and Graphically; Finding Limits Algebraically; Limits at Infinity.

Course Delivery

This course will be in a face-to-face format this semester. All students are expected to attend class regularly. Testing must be done in person. To allow for illness and other unavoidable absences, class will be recorded each day. Students that need to miss class will be allowed to ask for the class recording via email and will have 48 hours to watch the recording and send me their completed notes.

Last Day to Drop

The last day to drop a class is April 28, 2022.

Required Textbook

Precalculus: Mathematics for Calculus, 7th Edition, by Stewart, Redlin, and Watson.

Technology Requirements

To successfully complete this course, students need to have

- The ability to scan documents as a PDF and upload to Gradescope.
- Access to a computer and printer
- Reliable internet access

Communication

I will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone or Blackboard Collaborate

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Daily grades – HW (10%)/attendance (5%)	15%
Standards	5%
Exams 1-3 Average	60% (20% each)
Final Exam	20%
Total	100%

NOTE: Failure to pass all 5 standards by week 8 results in an automatic F for the course.

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

A = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

Assignment and Activity Descriptions

Standards

This section of Precalculus is part of a program aimed at improving pass rates and better preparing students for future math courses. It will include passing 5 standards of prerequisite material from College Algebra. While this material includes topics you mastered in College Algebra, some students still struggle with these topics. These topics are essential in Precalculus and Calculus, therefore remediation may be necessary.

These “standards” will consist of 5 short quizzes each consisting of 6 questions. You must get at least 4 of the 6 questions correct on each standard to pass that standard.

You must pass all 5 standards in order to pass the class regardless of your overall grade in the course. Grades on the standards will count 5% of your grade. You may attempt multiple standards in the same week. If you do not pass a standard you must wait until the next week to attempt it again. This means you have a maximum of 8 attempts at each standard. All 5 standards must be passed by week 8 of the semester. The last date to test over a standard is 3/11/2022. All standards must be taken in person. No remote testing is allowed.

Passing a standard during weeks 1 or 2 will result in a grade of 100 on that standard.

Passing a standard during weeks 3 or 4 will result in a grade of 90 on that standard.

Passing a standard during weeks 5 or 6 will result in a grade of 80 on that standard.

Passing a standard during weeks 7 or 8 will result in a grade of 70 on that standard.

If you fail a standard, there are resources available to help you learn these topics and practice before attempting to retake a standard. I strongly encourage you to come to my office for one-on-one help. You will also have access to a free online textbook (Openstax), free online homework practice (My Open Math-MOM) with videos over each topic. The math lab located on the third floor of the library will also be able to provide assistance on preparing for these standards.

Standards will be administered during my office hours or via appointment. Please email me to schedule your testing times. You can take more than one standard at a time if you so choose.

Attendance Grades

An attendance grade will be taken every day in class with the exception of exam days. Those who are in class and participating will receive a 100 for the day. Points will be deducted for tardiness, leaving class early, or being off task during class. Point deductions are at the instructor’s discretion.

If you miss class for any reason, you must do the following:

- 1) Email me the BEFORE you miss class and let me know why you are missing class. Attach a doctor's note if you have one. I will send you a link to the class recording.
- 2) Watch the recording of the class you missed and email me a copy of your filled-out lecture notes by 9 am the next class day.
- 3) Get your homework assignment from Blackboard, complete it, and upload it to Gradescope by the due date.

If you send me your completed lecture notes on time, you will not be counted absent for that day. Students with a doctor's note will receive an attendance grade of 100 for that day. Students who do not provide a doctor's note or other documentation will receive an attendance grade of 80 for that day. Failure to follow the directions above will result in an attendance grade of 0 for that day.

Exams

There will be three major exams and a comprehensive final exam. Calculators are not allowed on any exams. If you miss an exam and cannot make arrangements to take it before graded exams are handed back, your final exam will replace the missed exam. For those who do not miss an exam, the final exam can replace your lowest test grade if it is to your benefit.

The three major exams will be taken in the evening from 5-6:30 pm. The final exam will be taken during the time slot designated by the university. Our exams will be as follows:

- Exam 1: Wednesday 2/16 5 pm
- Exam 2: Wednesday 3/23 5 pm
- Exam 3: Wednesday 4/20 5 pm
- Final Exam: Wednesday 5/11 8-10 am

You may take an exam outside of the scheduled time ONLY if I give you written permission. If you think you will need to miss an exam, you must contact me at least 48 hours before the scheduled test time. All decisions regarding changes in testing will be made at my discretion.

If you are seen on your phone or other electronic device (such as a laptop or Apple watch) during an exam it is an automatic zero. Any academic dishonesty during an exam will result in a zero on the exam.

Homework

Homework will be assigned at the end of class each day and will be posted in Blackboard under "Homework Assignments." Assignments will consist of problems from the textbook. It is your responsibility to keep up with assignments and due dates. **All homework is due at 10:00 pm (CST) on the assigned due date.**

Guidelines for completing homework:

- 1) Complete each assignment on notebook or unlined paper. Work problems in the correct order and show all work. Assignments with incomplete or no work shown are an automatic zero. Make sure your work is legible.
- 2) Write your final answers on an answer sheet. (The answer sheet is available in Blackboard.) Fill in the first COLUMN before moving to the second column.
- 3) Take pictures of each page of your homework with your phone. **MAKE SURE THE ANSWER SHEET IS THE FIRST PAGE.** Convert to a SINGLE PDF file and save it.
- 4) Upload the homework to Gradescope. This is done by clicking on the Gradescope tab in Blackboard, choosing the correct assignment, and uploading your file.
- 5) After submitting, check to make sure the assignment uploaded, pages are in the correct order, and that the writing is readable. If it is not, you may upload again to replace your previous submission.

If you are having difficulty with Gradescope, please go to the "Gradescope Help" tab in Blackboard. You may also come by my office for assistance.

I do not accept late homework., but I will drop four daily grades before computing your daily average. This is the leeway you are given to allow for unavoidable absences. You need to think of this as your insurance in case you get sick or have a family emergency. Do not waste them!

Course Schedule

Week	Dates	Subject Matter
1	Jan 19-21	Syllabus, Contract, Pretest
2	Jan 24-28	1.2 and 1.3
3	Jan 31 – Feb 4	1.3 and 1.4
4	Feb 7-11	1.5
5	Feb 14-18	Review, Exam 1, 1.8
6	Feb 21-25	1.9, 1.10
7	Feb 28-March 4	2.1, 2.2, 2.3
8	March 7-11	2.4, 2.5, 2.6
9	March 23-25	Review, Exam 2, 2.7, 2.8
10	March 28-April 1	3.1, 3.2
11	April 4-8	3.3, 3.6
12	April 11-15	13.1, 13.2, 13.4
13	April 18-22	Review, Exam 3, 4.1, 4.2
14	April 25-29	4.3, 4.4, 4.5
15	May 2-6	Review for Final Exam
16	May 11	Final Exam

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)¹
- [Angelo State University Catalog](#)²

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).³

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁶ in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 [Student Absence for Observance of Religious Holy Day](#)⁷ for more information.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D.

You may submit reports in the following manner:

Online: [Incident Reporting Form](#)⁸

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).⁹

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)¹⁰ web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification.

¹ <https://www.angelo.edu/current-students/student-handbook/>

² <https://www.angelo.edu/academics/catalog/>

³ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

⁴ <https://www.angelo.edu/current-students/disability-services/>

⁵ <https://angelo.policystat.com/policy/10659448/latest/>

⁶ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

⁷ <https://angelo.policystat.com/policy/10659368/latest/>

⁸ <https://www.angelo.edu/incident-form>

⁹ <https://www.angelo.edu/title-ix>

¹⁰ <https://www.angelo.edu/covid-19/>