

## Pre Calculus

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My Schedule								
8 am	1	2	3	4	5	6	7	Until 4 pm
Office Hours	AP Statistics Room 224	AP Statistics Room 224	PreCalc Acc Room 224				PreCalc Acc Room 224	

**Required Text:** *PreCalculus and Intro to Calculus* K. Quattrin, P. Maychrowitz 2023 (Digital Text)

**Course Description:** This course is designed to give each student a thorough preparation for and a basic introduction to Calculus. The first semester topics include the trigonometric and circular functions and their applications, identities, oblique triangles, vectors (in two dimensions) in rectangular and polar form, and complex numbers as vectors. The second semester topics include the study of polynomial, rational, irrational, exponential and logarithmic functions and their graphs. The course introduces The Calculus and covers limits, continuity and basic derivatives.

### Screencasts

Screencasts are designed to *introduce* topics outside of class in order to allow more efficient use of class time. Please note that they are not intended to take the place of in class discussion of new content but rather to offer a pre-class introduction to what will be discussed. Some screencasts will include online quizzes that will be part of the unit homework assignment.

Screencast solutions are designed to walk you through the problem solving process on specific problems in order to help you further develop your own problem solving skills.

### Class Expectations

*Struggle is a feature of education, not a bug.*

*Pay attention to your learning. The grade will take care of itself.*

- Problem solving in class is like piloting a flight simulator. You can learn from mistakes without consequences.
- Failure does not have to be a permanent condition.
- If you don't know or remember something, **look it up** (except on an assessment of course). Use the resources you have such as iPads, books, notes, classmates, etc.
- Be cooperative with not only the teacher but with each other. A positive learning environment depends upon everyone. This means respect each other's feelings, physical space, and property.
- When working in groups, maintain your "table voices".

- The question "Will this be on the test?" will only be answered during the last five minutes of any class period.
- **Bring to class everyday:**
  1. Your iPad (please make sure it is charged or at least above 30%) since the text is digital. It is accepted but not required that you do your written work on your iPad. It will also help if you keep a pair of ear buds handy as well for the (rare) occasions when I ask you to watch a screencast in class.
  2. Paper and pencil even if you prefer to do your writing on your iPad. You will be asked at times to do work without any electronic aids.
  3. Your graphing calculator (TI 83 or higher)
  4. Desmos app for the iPad is recommended but not required. While you can use the web version this app is free and runs more quickly.
  5. A measuring straight edge or protractor
- **Warm ups:** Be ready to do a warm up problem every day. Warm up problems will be given to you as class begins and you will be expected to begin working on it at the bell *without prompting*.
- **Board Review:** Be prepared every day for problem solving on the board. Students may be selected at random for board presentation of classwork/homework problems. If you are called you may 'draft' one classmate to accompany you to the board for assistance but you must remain at the board to answer questions that students may have about your work until the board review session is over.
- **iPad Usage:** All iPad apps are to be cleared upon entering class. Students are to have their iPads flat on your desk when in use. Non-academic use of iPads is not allowed. On first offense, the iPad will be confiscated for the duration of the period. Repeated offenses on this policy will be referred to the Dean's Office.
- **Apple Classroom:** At times, it will be necessary for class efficiency for everyone to navigate to the same page or to be using the same app for a particular unit of study. In order to accomplish this, students are expected to sign into Apple Classroom at the beginning of the year. If technical issues cause your device to sign out or not be able to join, see me outside of class to discuss next steps.
- **Airpods:** Airpods are not to be used during class time without express permission from the teacher
- **Cell phones:** Cell phones that are out in class will be confiscated for the duration of the school day. Chronic offenses on this policy will be referred to the Dean's Office.
- **AI Usage Policy:** Use of AI tools in this course is encouraged (keep reading) as a starting point for further exploration and analysis, engaging in discussions with peers and teachers to deepen

understanding. More specific limits per assignment will be given by the teacher. It's imperative that all work submitted should be your own. The information derived from these tools is based on previously published materials. Therefore, using these tools without proper citation constitutes plagiarism. Any assignment for which the solutions are found to have been plagiarized or to have used unauthorized AI tools may be reported for academic misconduct. If you are not sure whether your use of AI with an assignment exceeds the limits outlined here, ask the instructor. As you discern your AI usage, keep in mind the following:

- Because AI uses large language models merely to summarize (however eloquently) data that can be found on the internet, information derived from these tools, like any information found on the internet, is often inaccurate or incomplete.
  - While apps like Photomath and websites like Wolfram Alpha are very useful in helping you with problems, you should not use them to do work for you - using them to help you understand a problem is appropriate, having them solve problems on tests or quizzes is cheating.
  - In addition, ChatGPT is quite bad at math and will often give incorrect or incomplete responses, and it will often "double down" on mistakes it has made and try to convince you it is correct when it isn't.
- **Absences:** It is your responsibility to find out the assignments and tests missed while absent. Weekly assignments will be posted on the homework site. See me in the event of any long-term absence.
  - **Retreats:** You will be given a reasonable amount of time, usually a week, to complete all homework assignments and assessments. It is your responsibility to inform me of this absence prior to the retreat. Consult with classmates or the homework site for assignments and tests. In such cases an individual due date for make-up assessments will be posted on PowerSchool.
  - **Cheating** is a betrayal of the student-teacher relationship and will be dealt with harshly. I expect and encourage you to collaborate (to collaborate is not to copy!) on problem sets, projects and investigations unless I tell you otherwise, but ANY sharing of information either about or during quizzes or tests will not be tolerated. This includes but is not limited to using a graphing calculator to store inappropriate information or discussing the contents of a quiz with students in another class. Honor and integrity are expected. **See Pages 14-15 of student handbook Academic Integrity and the Pursuit of Academic Excellence**

## Grading Policy

### **Standards Based Grading**

Students will be graded by assessment of skills (or Standards) specific to each section covered in the text. While the cumulative grade in the class is the quantitative average of each assessment, the midterm, and final exam scores, the assessment of each standard is by rubric and is ***not point based***. This is meant to measure student proficiency throughout the semester in a way that allows the student improvement to be reflected in their grade. Midterm and Final Exams will also be standards based and scored on student performance on the standards covered on the exam. The rubric is as follows:

- 10 - Student has shown mastery of this skill (note: work must be without mistakes of any kind in order to receive this grade)
- 9.5 - Student has shown mastery of this skill but work contains minor arithmetic mistakes
- 9 - Student has shown strong understanding of this standard
- 8 - Student has shown proficiency having taken correctly worked significant steps toward a solution to the problem
- 7 - Student has shown base level competency with incomplete or incorrect solutions showing significant gaps in understanding
- 6 - Student has not shown competence with incomplete or incorrect solutions requiring review of fundamental concepts, demonstrating some recognition of concepts or procedures
- 5 - Student has demonstrated no understanding of the concepts associated with the standard

### **Assessments & Homework**

- Students are expected to complete homework assignments as preparation for assessment of the standard(s) being covered. This includes any online quizzes assigned with a screencast and journal assignments.
- Homework must be completed in order for that assessment to count towards their final grade. If a student does not complete the assignment by the time of the assessment the student will receive a default grade of 5/10 until the homework is submitted. Any score of 10/10 on the first assessment will count regardless of whether the student submits the homework. Students must submit the homework via email or Canvas as either a pdf or through a shared folder.
- Some assessments may contain one or more “surprise” standards. These are past standards that could be reassessed with or without warning on a quiz.
- Missed assessments must be made up within two weeks or they will become a 5/10 at which point they will count as part of the weekly reassessment limit (see below).

## Reassessing Standards

A student may reassess any standard at a maximum of three per week (including assessments not made up within the two week time limit). Reassessment requests must meet the following expectations:

- Homework for standard(s) to be reassessed must be submitted first.
- A student must make an appointment using only [this form](#). The date and time requested on the form must be approved and a calendar date set via the school email calendar. The student must state both the standard number *and its definition*. Appointments are scheduled on a first come, first served basis.
- The student must bring assessment corrections to the appointment or at least be prepared to do them at the appointment. The student must complete at least one readiness problem to be approved to reassess.
- The grade earned on a reassessment will replace the previous grade *even if the grade is lower than the previous one*.
- A student can only reassess a standard covered in class during the current academic quarter.
- Approved reassessments must be scheduled with the teacher and taken before the end of the quarter.
- The deadline to sign up for reassessments are as follows:

Term	Deadline
First Quarter	Friday September 29, 2023 at 3 pm
Second Quarter	Friday December 1, 2023 at 3 pm
Third Quarter	Friday March 1, 2024 at 3 pm
Fourth Quarter	Friday May 10, 2024 at 3 pm

## Final Grade Calculations & Percentages

%	Grade
100-93	A
92-90	A-
89-87	B+
86-83	B
82-80	B-
79-76	C+
75-68	C
67-64	C-
63-55	D
55-0	F

Final Grade	
1. Standards Assessments	80%
2. Midterm Exam	10%
3. Final Exam	10%