Cuyamaca College Fall 2026
MATH 176 (Section # 2752)
Pre-calculus Functions & Graphs

Instructor: Bryan Elliott
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Class Times: 9:30 am – 12:35 pm (TTh)
Room: H-139
Office Hours: MW 8:00 am – 8:30 am
TTh 8:30 am – 9:30 am & 12:40-1:10pm
Online W 7pm-8pm
Office: H-112

COURSE DESCRIPTION:

MATHEMATICS 176
Pre-calculus: Functions and Graphs
Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates. Maximum of 7 units can be earned for successfully completing any combination of MATH 170, 175, 176.

PREREQUISITE FOR MATH 176: Appropriate Placement or Intermediate Algebra

STUDENT LEARNING OUTCOMES: Upon successful completion of this course, students will be able to:

Math 176
• Interpret graphical information, such as identifying types of functions, translations, inverses, intercepts, and asymptotes. • Solve inequalities and a variety of symbolic equations involving algebraic and transcendental functions. • Construct appropriate models for real-world problems, such as fitting an algebraic function model to a set of data, and systems of linear equations.

REQUIRED TEXT AND MATERIALS:

- Text: In lieu of a textbook we will use the online learning materials available in our *Interactive Precalculus on Canvas* Course. This is the Canvas course that the Cuyamaca math department faculty have developed for our Math 176 class—AND IT'S FREE!
- Calculator: A graphing calculator such as the TI-84, TI-89, or Voyage 200 is required for this class. If you do not already own a graphing calculator, contact the Cuyamaca College Library to learn how to check out a TI-84 for the duration of this class (free of charge). Note: some students have successfully completed this course by using Desmos.com (a web-based graphing calculator) along with a scientific calculator such as the TI-30XIIS in lieu of a handheld graphing calculator. The Mathematics Department of Cuyamaca College highly recommends and supports the use of Texas Instruments graphing calculators. If you need a calculator for class I will have TI 84's available to check out during each class session with a student ID.
- One 1.5" binder, Notebook paper, pencil, big eraser, highlighter, ruler, and color pencils/pens.

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HOW DO YOU LEARN?

Learning is a 3-step process. ENCODING--getting the information into your brain. STORAGE--self-explanatory, but most people forget that there are two types of memory, short-term and long-term. Short-term memory can only handle 5 to 7 things at a time. Hence, the reason that phone numbers are usually 7 digits. Long-term memory storage is what we desire to achieve so that we know that something has been learned. The last step in the learning process is RETRIEVAL. This course will put a heavy emphasis on the retrieval process. We will be utilizing multiple techniques to develop this retrieval process.

BE PRESENT, BE POSITIVE, AND BE PERSISTENT. Lastly, you will learn best if your engagement and support is a triangle. Student--teacher--friend/classmate/parent etc. Find that 3rd side of the triangle to keep you engaged and responsible.

RESPECT: You are expected to be courteous to each other and to the instructor. You will be asked to leave the class for display of behavior the instructor deems as disruptive to the learning environment.

CLASS POLICIES/ EXPECTATIONS:

Your decision to enroll in this class constitutes an implicit agreement to the following:

ATTENDANCE: My goal is to help you achieve success in this course. To maximize the opportunity for us to succeed as a team, we all need to be together as much as possible. You are expected to attend each class, arriving on time, and remaining for the entire class. Please grant me the courtesy of letting me know at the beginning of class if you will need to leave early.

- I do not want to institute an instructor withdrawal for anyone. Please reach out to me if you have outside influences(job, family, personal) that are interfering with your participation. I'll do my best to help find a solution. Sadly, I do need to include the following policies regarding withdrawals(drops) from the course.
- **You may be dropped from the class if you are absent more than 4 days (12 hours).** Attendance is highly correlated with success. Please come and see me if this might be a problem. When you are dropped you may receive a "W" or an "F", depending on the date dropped.
- **Unassigned break.** Emergencies happen but we do not want them to repeatedly interfere with yours or your colleagues learning environment. If an emergency arises please grant me the courtesy of letting me know (expecting cell phone calls).

**Do not assume that you will be dropped if you do not attend classes. To ensure that you are withdrawn, you must officially withdraw online, in person, or by telephone. Failing to drop a class in a timely manner may earn you a failing grade in the class.
**You are responsible for getting class notes from other classmates and getting any schedule changes or other class announcements from classmates on days missed from the class. Any changes and class announcements will be made known in class. It is not acceptable to return to class following an absence and claim that you did not know.

NO CELL PHONES: All cell phones must either be turned off or put on silent during class time. They are not allowed on desks during exams. I am as attached to my cell phone as anyone I know. Peer-reviewed studies have shown that the distractions created by our "technology" is highly correlated with a poor attention span and thus a subpar learning environment.

ACCOMMODATIONS: *If you have a documented disability and need accommodations for this class, please send me your DSPS Academic Accommodation form as early as possible. You must complete the Student Registration for Test Proctoring form on the Test Proctor Website or contact the Test Proctor directly at cuyamaca.dspstesting@gcccd.edu*

TUTORING: To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services available in the STEM Center (the Tutoring Center). For Fall 2026, Online Tutoring and (Limited) In-person Tutoring has been consolidated into one Cuyamaca Tutoring Center, which will be open Monday 9-3, Tuesday 9-5, Wednesday 9-5, Thursday 9-3, Friday 10-2. Those are in-person tutoring hours. There are different hours available for Zoom tutoring sessions. You will also be able to request a Zoom Video Tutoring session, an Email Tutoring session, or an In-person tutoring session right from your Canvas container by clicking the blue "Tutoring" link on the left side of your course container and completing the request form. You may also email Cuyamaca.Tutoring@gccccd.edu, visit their website at https://www.cuyamaca.edu/student-support/tutoring-center/index.php or leave a message with your callback information at (619) 660-4525 for more information. NOTE: Zoom tutoring session have variable time and day of the week availability. Please go to the Tutoring Center website or call for more information.

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METHOD OF EVALUATION:

This class is a 6 unit course. Your semester grade will be based on the different categories listed below:

- Module Checkpoints — 40% of overall grade
- Unit Checkpoints & in-class Summative assessments — 40% of overall grade
- Weekly reflections — 5% of overall grade
- Final Exam — 15% of overall grade

The grading system will be as follows: …A (Above 90%); B (80% - 89%); C (70% - 79%); D (60% - 69%); F (below 60%)

MAKING THE GRADE: You must earn at least a D on the final to earn a passing grade in this course! You cannot get a passing score in the class without getting an overall average score of at least a D on the final AND at least 70% overall grade.

Module Checkpoints 40%

At the end of each learning module, you will have a *Module Checkpoints*. This is a computer-based *Checkpoint* that is automatically graded with feedback. You will have three attempts on each version of each question, and you can revise your work after reviewing the feedback. Think of these checkpoints as take-home quizzes. I will drop your two lowest scores from this category.

Unit Checkpoints and in class Summative assessments 40%

At the end of each Unit is a computer-based automatically-graded *Unit Checkpoint* with feedback. You will have three attempts on each version of each question, and you can revise your work after reviewing the feedback(so long as you have attempts left. Think of each *Unit Checkpoint* as a take-home exam covering multiple modules. No make-ups, but I will drop your single lowest *Unit Checkpoint*. There will be 3 to 6 in-class summative assessments given during the semester. These will be based off of the Unit Checkpoints and module checkpoints for each unit. Dates will be announced in class

Weekly Reflections 5%

At the beginning of each week, you are required to submit a 3 question reflection paper through Canvas. These are a critical part of the "teaching your brain" how to retrieve process

Final Exam 15%

No make-ups and no dropping low scores.
The final exam is currently scheduled for the last day of instruction, December 17

ACADEMIC DISHONETY: We have most of our classwork setup to be completed through Canvas. If you are having difficulty understanding and/or completing our assignments, please reach out to me. This course is *a preparation for Calculus*. If you have the desire to cut corners and submit work that you are not responsible for, it will penalize your progress. If your instructor identifies an instance that arouses suspicion, he will request a brief conference with you to find out if there are underlying issues that might have led to the instance. If it occurs more than once, you will run the risk of earning a '0' on that assignment and I will have the option of reporting it; this could result in sanctions which include removal from the class.
My goal is to help you find a way to succeed in this course by meeting our learning outcomes. I am here for you to help assist you in your journey towards that goal.

**You are expected to keep up to date, study your notes and do the homework. The usual rule of thumb for college courses is a minimum: Two hours of study out of class for every hour in class. Since we meet 6 hours per week, you should spend at least 12 hours studying and doing homework for this class each week.

Good Luck and Have a Great Semester!

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Tentative Schedule

Week 1	**Intro/Start Unit 1**
Week 2	**Unit 1**
Week 3	**Unit 1**
Week 4	**Unit 2**
Week 5	**Unit 3**
Week 6	**Unit 3**
Week 7	**Unit 4**
Week 8	**Unit 4**
Week 9	**Unit 5**
Week 10	**Unit 5**
Week 11	**Unit 6**
Week 12	**Unit 6 & Unit 7**
Week 13	**Unit 7**
Week 14	**Unit 8 & Unit 9**
Week 15	**Unit 9 & Systems of Equations**
Week 16	**Review and catch up**

Thursday, December 17 is the last day of the course and there will be a final assessment during this date.

Important Dates:

- August 24 First day of classes
- September 4 Last day to add/drop/receive a refund
- November 14 Last day to drop semester length classes (with a W)(75% of course complete)
- Nov 23 – Nov 27 Thanksgiving Break
- December 21 Last day to petition for Pass/No pass

TIPS FOR SUCCESS

Ponder these success principles so you can achieve your best from this class.

- BE POSITIVE -- Make friends and do your homework together in groups.
- BE PERSISTENT -- Come on time and stay the whole time. Read the new material BEFORE it is presented in class.
- BE PRESENT--Take responsibility for your own learning.
- BE PERSISTENT--Ask questions – lots of questions – to yourself, to classmates, to tutors and to the instructor.

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