

Early Transcendentals

MTHC2210 Fall 2026 Syllabus

Class Days and Times: Tuesdays and Thursdays 12:30-3:00PM

Class Location: Cuyamaca College, H-building, Room 134

How to Get in Touch with Me (Your Instructor, Prof. Ross)

Instructor: Wayne Ross (he/him)

Answers to Mr. Ross, Sir, Professor

College Email: wayne.ross@gcccd.edu

Preferred Method of Contact: Canvas Inbox

In-person Office: H-116

Virtual Office: Find “TechConnect” In Canvas

I am thrilled to help you in any way I can, so if you ask a question of me outside of class/office hours, I will respond as soon as I can. Even if I don't have an answer, I will at least let you know I am looking into it!

Student Hours

I am available 60 minutes after class (12:45pm, whichever is later) to assist you with whatever your journey needs! If you'd like to ensure you're the main focus, send me a meeting invite in Canvas.

Welcome to the course!

Welcome to C2210, also known as Calc I! My name is Wayne Ross, so as long as you call me something respectful, I will most likely respond!

Something you'll hear me say often...“The greatest judge of intelligence is self-awareness”. This applies heavily to not only this course, but to life in general. If you are in Calc I, you will work on concepts and skills needed in future mathematics courses. Most students who take Calculus proceeded in STEM (Science, Technology, Engineering, and Mathematics) majors. If you are unsure if this is the class you want to take, let me know and I will connect you to people much more prepared to help you find the class you need!

As your professor, I ask you to maintain the Big 3 (a phrase we used consistently during my time in the military):

- 1) Do what you're supposed to do; this means keeping up with deadlines on assignments, participating in classwork, and studying/preparing for exams.
- 2) Be where you're supposed to be; a great judge of ability is availability. Being present in class (not just physically, but mentally) is the best way to accomplish this.
- 3) Look good doing it; learn Microsoft/Google's equivalent of math writing for your notes and assignments. Or make sure your handwriting is great!

When I applied these to my learning, I found that I was much more successful! Those are very broad, or big, topics, and we'll break them down often to show how they apply. The most important part: I (and all the Cuyamaca staff) are here for you. If we go to a concept, thought, process, or even number that you do not understand, DO NOT LET ME MOVE ON. Ask questions; practice; ask more questions; practice more. You'd be surprised how many others might have the same question!

In a very classic manner, if you are real with me, I'll be real with you. If you have life happen, and you should have life happen because you are an adult, speak with me. Will you get grace on every deadline every time? Probably not. But are you late to class because your car broke down? I may be graceful.

Hate Free Zone

In our classroom (in person, on Zoom, or online), we should feel free to express our opinions and ideas in a respectful manner. We all need to be open to listen and appreciate differences in opinions, life experience, worldviews, values/beliefs, etc. **I value and affirm the rich diversity of human experiences, but we must all do our part in developing and maintaining our class as a hate-free zone, a positive learning environment for all.** Comments or actions that discriminate based on race, gender identity, age, physical or mental ability status, language, religion, sexual orientation, veteran status, physical characteristics, fitness level, etc. will not be tolerated. While we will often disagree with other people, it does not give anyone the right to intentionally hurt others with words or to discriminate against them. **Words have power.** Please keep this in mind with EVERY interaction you have.

What You Will Need for Our Course

Required Materials

1. Textbook – Don't worry about it

There is NO textbook to buy because it is 2026. All of our assignments/work will be available on Canvas/Active Calculus. **If you cannot log into Canvas, contact the Cuyamaca College Help Desk at (619) 660-4395 or email c-helpdesk@gcccd.edu.**

2. Graphing Calculator – \$0 to \$150 (Texas Instruments TI-84 Plus recommended, image to the right)

Options from free to full-price:

- **During class using your Student ID**, I can provide you with a TI-84.
- **Free semester-long check out of a TI-84 calculator from our campus Library** Monday through Thursday 9:00 am – 7:30 pm. If you have any questions or want to check on availability, email cuyamaca.circulation@gcccd.edu or call (619) 660-4416.
 - **They will need your name** (you can show a photo ID, any will do), your **student ID number**, and **proof of your enrollment in a Cuyamaca math class** (printed out, schedule pulled up on your smartphone, or a screenshot of it).
- **Simulators for smartphones** – Navigate to your Play Store and search for and install a graphing calculator simulator (students have suggested Desmos, CALC84, Graphing Calculator X84, etc, but I would really appreciate your input)
- **Ask a friend, family member, or neighbor** – Many people have one they no longer use.
- **Purchase one as cheap as possible** – I still have a TI-83 I used in High School that does 95% of the things you need to do in this class (the other 5% you have to be a calculator). So again, an option.

WARNING: I am only able to help you learn how to use the TI graphing calculators or Desmos. I cannot help you with any other calculators like TI-Nspire, Casio, etc.



3. Reliable Internet Access

In this class, teaching and learning occurs live (synchronously) in person and on your own time (asynchronously) on Canvas. You will need reliable internet access and a computer to work through our materials on Canvas, watch videos, and complete assignments. **Let me know throughout the semester if Wi-Fi or access to a computer ever becomes an issue.** I can contact and connect you with available campus resources.

Resources – Cuyamaca Has Got You Covered

Faculty (like me), student tutors, counselors, and more are ready and waiting to provide you with services: mapping out your educational plan, choosing classes, applying for scholarships, finding student aid, refining study skills, locating and using sources for an essay. Whatever you need, we have someone who can help. Some services are listed below, but more can be found in the ***Orientation & Tools for Success*** module of our Canvas course. Remember that you can always reach out to me if you are not sure.

Academic Accommodations

Academic accommodation is available for students with disabilities. Please identify yourself to me and to the Disabled Students Programs & Services (DSPS) staff so that the appropriate accommodations can be ensured. If you suspect you have a learning disability or need services relate to a disability, contact the [DSPS Office](#), G-238, at the Student Services One-Stop Center or call (619) 660-4239. Video phone: (619) 567-4275.

Canvas Assistance

New to Canvas? Check out the [Canvas help for students](#). 24/7 support is available for Canvas, call 1-844-592-2205 for help.

Help Desk

The [Help Desk](#) is your best resource for troubleshooting technical difficulties associated with your student accounts. Email c-helpdesk@gcccd.edu anytime or call (619) 660-4395 and have your student ID number at the time of your call.

Cuyamaca Cares

Cuyamaca College believes that food, housing, and mental wellness are basic rights that you deserve to have. If you are experiencing homelessness, or need assistance securing these basic rights, please contact the Cuyamaca Cares Basic Rights Center at 619-660-4203 or visit our website at www.cuyamaca.edu/cuyamaca-cares.

Tutoring

The easiest way to request an appointment is to log into Canvas, click the blue “Tutoring” link on the left side, and complete the request form. You can also directly email Cuyamaca.Tutoring@gcccd.edu with the course and time you would like to meet with a tutor, or visit their website at www.cuyamaca.edu/tutoring, or leave a voicemail message with your call back information (name, phone number, id, class number) at (619) 660-4525. Tutoring options and times are listed below.

- **In-person** (30 -minute one-on-one and 1-hour group sessions) on the **first floor of H-Building**
 - Monday through Friday 9 am – 4 pm
- **Zoom** (30-minute one-on-one and 1-hour group sessions)
 - Monday, Thursday, and Friday 9:30 am – 4 pm
 - Tuesday and Wednesday 9:30 am – 7 pm
- **Email** (send your essay or submit a question)
- **Night and Weekend Services** – provided for most courses are by an **outside service** called *NetTutor*.

Other useful links: [Course and Assignment Resources and Guides](#); [The Cuyamaca Tutoring YouTube Channel](#);

What Students who used Cuyamaca Tutoring Want You to Know

“Use Tutoring! I was skeptical, but I was wrong. My tutor was great and helped me talk through concepts until I understood.”

“Just do it. Don’t be intimidated or ashamed of asking for help.”

Our Class – A Community of Teachers and Learners

Forget about those traditional math classrooms where teachers host long lectures loaded with content, students diligently take notes while struggling to understand, work through large repetitive problem sets, and never get to chat with their classmates. Learning math this way may work for some, but for many, the traditional math classroom does not allow students to engage with the course material in a meaningful way.

To improve learning and boost your success in this course you'll study math in a student-centered classroom where both the math content and assignments are all broken into smaller bite-size pieces so we can learn and practice little by little before putting it together. So how does it work?

Typical In-Class Experience

- **Lecture:** Topic introduction and content focused ideas.
- **Hall of Just-Us:** You'll actively work on content and gallery walk for explanations.
- **Homework:** You'll be given your homework to complete in class (depending on time). Teamwork makes the dream work!
- **Return Ticket:** You will be given a problem/task to complete at the beginning of class. **THIS IS A GRADED ACTIVITY.**
- **Reviews:** You will be given a set of problems/tasks that will help you prepare for the exam. While this is not graded, doing it will greatly help you prepare for the exam (and it's corrections)
- **Exams:** Exams are an in-person review of your learning. See below for more information.

Typical Canvas Experience

- **Slim notes;** I post a very short and succinct (but highlights) of the lecture in class.
- **Assignments;** Your other graded activities will be shown in Canvas.

Our Current Political Climate

Here is the true and official word from the college, its staff, and most importantly ME:

"Our campus is committed to maintaining a welcoming, safe, and inclusive environment where every student, regardless of immigration status, is supported in their educational journey. We recognize that the current political climate may cause uncertainty and anxiety. Please know that regardless of these challenges, you are a valued and essential part of our academic community. We encourage you to take full advantage of the resources available to you on campus, including but not limited to counseling, legal assistance, financial support, and more. The Dreamers Resource Center and other support networks on our campus are available to assist with any concerns you may have during this time."

General Schedule

8/25	Tue	2.1	10/6	Tue	3.5	11/17	Tue	Checkpoint Day
8/27	Thu	2.2	10/8	Thu	3.6	11/19	Thu	5.1
9/1	Tue	2.3	10/13	Tue	3.7	11/24	Tue	Thanksgiving
9/3	Thu	2.4	10/15	Thu	3.8 / Mention 3.9	11/26	Thu	Thanksgiving
9/8	Tue	2.5	10/20	Tue	Checkpoint Day	12/1	Tue	5.2 / 5.3
9/10	Thu	2.6	10/22	Thu	4.1	12/3	Thu	5.4
9/15	Tue	2.7	10/27	Tue	4.2	12/8	Tue	5.5
9/17	Thu	2.8	10/29	Thu	4.3	12/10	Thu	5.6
9/22	Tue	Checkpoint Day	11/3	Tue	4.4	12/15	Tue	Checkpoint Day
9/24	Thu	3.1 / 3.2	11/5	Thu	4.5	12/17	Thu	USHER
9/29	Tue	3.3	11/10	Tue	4.6			
10/1	Thu	3.4	11/12	Thu	Veterans Day			

Any information above is tentative and may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see *Academic Policies* stated in the [catalog](#).

Grade Breakdown & Category Descriptions

Course grades are earned based on the skills developed and the effort shown when working through our key learning goals. Learning is a process that involves collaboration, struggles, mistakes, and recoveries. Parts of your grade are based on low-stakes assignments that value effort and a little risk-taking as you grow your skills. Other parts of the grade are based on higher-stakes comprehensive assessments that showcase your achievements of our course learning goals. The best part is all this done with the support of your peers and assignment redoes that give us chances to learn from our mistakes.

Math C2110 Grade Summary		Grading Scale	
Categories	Percentage	Passing Grades	Not Passing
Return Tickets	10%	A+ = Over 97%	D = 60-69.9%
Student Surveys	5%	A = 93-96.9%	F = Below 60%
Module Checkpoints	15%	A- = 90-92.9%	The letter grade of C-, D+, or D- will not be assigned
Unit Checkpoints (Online)	30%	B+ = 87-89.9%	
Unit Checkpoints (In Person)	40%	B = 83-86.9%	
Rubrics for all work / exams will be given.		B- = 80-82.9%	
		C+ = 77-79.9%	
		C = 70-76.9%	

Return Tickets – 10%

At the beginning of each lesson, you will complete a pop quiz on the previous lesson.

Student Surveys – 5%

Student surveys are used to help ME (and hopefully the division, department, and college) gain actual information about students and their success. These surveys are always anonymous, so you are **STRONGLY ENCOURAGED** to be honest and thorough. The “assignments” for the surveys will just require a screenshot of you submitting the survey. This data will not be shared with anyone directly and only my presentations on that data will even leave Canvas.

Module Checkpoints– 15%

In this course, you will be assigned checkpoints for each lesson. Use your time wisely to complete and ensure you turn in with joy and vigor (and I can read it).

Exams – 70%

During this course, we will have “Checkpoint Day”, where you will be asked to show me what you know. It comes in two parts: online and in-person.

Unit Checkpoints (Online) – 30%

The online portion can be conducted at any point between the end of the last lesson and the end of checkpoint day. If you need technology, let me know ahead of time so I can schedule the lab.

Unit Checkpoints (In Person) – 40%

The In-Person portion must be completed on Checkpoint Day. No notes, no teamwork, just you and a concept from the unit to show your learning.

Class Expectations & Guidelines

Time Commitment

So many things in our lives demand our time and attention, so it is important to know how much time we can expect to spend on our class each week. We spend 2.5 hours 2 days a week in class (4 hours). The common practice is that you should spend 2 hours for every in-class hour studying, which means setting aside an additional (roughly) 2 hours a night the other 5 days of the week. I want to Venn diagram some of those hours, but you should EXPECT that much time.

Attendance & Participation

See above in regard to attendance and participation. While these things aren't graded directly, lack of attendance will hinder you from achieving marks in other areas. Additionally, this is your education; active participation in it will make it feel like yours more than just another checkbox to complete.

Grading & Feedback (In-person & Online)

The feedback in this class is intended to help you determine how to invest your time and energy to maximize learning.

- **Grading.** Grades are an objective method to measure your success. No grade is final until the grades are turned in at the end of the semester.
- **Feedback From Me.** I like doing math. I like seeing students achieve the feeling of success. I ask that you take feedback from me directly and on the chin; if I say "you should work on derivatives", then work on derivatives in free work, office hours, or on your own time.

How to Move Forward When Things Get Tough

Late Work

As the Social Psychologist Dr. Devon Price (they/their/theirs) said in an article ...

"People do not choose to fail or disappoint. No one wants to feel incapable, apathetic, or ineffective. If you look at a person's action (or inaction) and see only laziness, you are missing key details. There is always an explanation. There are always barriers. Just because you can't see them, or don't view them as legitimate, doesn't mean they're not there. Look harder."

As a Calc1 student, this may be your first attempt at college level mathematics. You may run into problems (both math and other types) that hinder your progress, and therefore need to turn in work late. However, Math is a pyramid; it is difficult to build the next level (not impossible, but well...it wouldn't be a pyramid) without the one below/base. This is why it is difficult to accommodate late work assistance. Each unit's work is due one week after it's checkpoint day.

Academic Integrity

Academic integrity is about being honest and holding ourselves accountable in all academic pursuits, even in the face of challenges. This involves doing and submitting your own work, getting credit for your ideas, and **giving credit** to those whose work we refer to or use **each time** and **every time**.

Maintaining academic integrity in our class is easiest when you and I work together! For each graded assignment, it is important for us both to clearly communicate what our thoughts and expectations are. I know you want to be successful and proud of your work, so if you are not sure how to do an assignment, have questions, need more time, anything at all, contact me right away. If you are thinking about using any apps, websites, or other services let me know, many do not provide adequate explanations, they have incorrect answers, or use methods not introduced in this course. When we meet, I can guide you to other useful resources.

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In general, students are expected to adhere to the College's Academic Honesty/Dishonesty Policy found in the *Academic Policies & Procedures* section of the College Catalog. If you are suspected of academic dishonesty, I will reach out to you to genuinely find out how things are going, identify the cause, and make a plan how to approach future assignments. If this happens again or becomes a pattern, I am concerned that this behavior is jeopardizing your future success. The Dean of Academic Affairs will be notified as they have access to more resources and will be able to better guide you going forward.

Let's also discuss AI. I will stand that AI tools are a wonderful addition to the human experience, and can be used for amazing growth in learning such as creating practice problems and finding mistakes. HOWEVER, using AI tools to do the work for you is a no-go. It is frustrating and while all of you are smart enough to complete the work, work ethic can slip. So just don't do it. Do your own work and we will be fine!

Drop Policy

In my coaching, I say this phrase a lot: one time is a mistake, twice is a trend, three times is a problem. This is the basis for my drop policy in this course.

You need to maintain a passing grade at deadlines to remain enrolled. These deadlines are:

No-Pay Drop Deadline: This is the deadline before census where you can drop without penalty (pay or grade).

W-Deadline: At this deadline, you can drop with a W. No pay penalty, but will appear on your transcript as a W.

The only way to stay in the course past these deadlines is COMMUNICATION. If I reach out to you and you do not respond, you will be dropped.

Official Class Description

You can find the official Cuyamaca Class description is attached as an addendum at the end of the syllabus.

That's it for now, stay in touch and have a great semester!

ADDENDUM 1: Course Outline of Record

Mathematics C2210 – Calculus I: Early Transcendentals

5 hours lecture, 5 units

Catalog Description

A first course in differential and integral calculus of a single variable. Topics include limits and continuity of functions, techniques and applications of differentiation, an introduction to integration, and the Fundamental Theorem of Calculus. This course is primarily intended for Science, Technology, Engineering, and Mathematics (STEM) majors.

Formerly MATH 180. Not open to students with credit in MATH 180.

Prerequisite

Pre-calculus, or college algebra and trigonometry, or equivalent, or placement as determined by the college's multiple measures assessment process.

Entrance Skills

Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:

- 1) Algebra: domain and range, solving equations involving polynomials, rational functions, logarithms, exponents, radicals, and absolute values.
- 2) Trigonometric identities and formulas; standard angles; converting between radians and degrees; solving trigonometric equations.
- 3) Analytic geometry; formulas for standard geometric objects; properties of geometric figures; similarity
- 4) Mathematical modeling and recognizing mathematical arguments.
- 5) Graphing functions and their inverses; and interpreting graphs.

Course Content

Part 1:

- 1) Limits: intuitive and precise definitions; computation using numerical, graphical, and algebraic approaches
 - 2) Continuity and differentiability of functions
 - 3) Derivative as a limit
 - 4) Interpretation of derivatives as slopes of tangent lines and rates of change
 - 5) Differentiation formulas: constants, power rule, product rule, quotient rule, and chain rule
 - 6) Derivatives of transcendental functions including trigonometric, exponential, and logarithmic
 - 7) Implicit differentiation, differentiation of inverse functions, including inverse trigonometric functions
 - 8) Applications of differentiation, including related rates and optimization
 - 9) Higher-order derivatives
 - 10) Indeterminate forms and L'Hôpital's Rule
 - 11) Maximum and minimum values, Extreme Value Theorem
 - 12) Graphing functions using first and second derivatives, concavity, and asymptotes
 - 13) Mean Value Theorem
 - 14) Antiderivatives and indefinite integrals
 - 15) Definite integrals as limits of Riemann sums
 - 16) Interpretation of the integral as area under a curve and net change
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- 17) Basic integration rules and properties of integrals
 - 18) Fundamental Theorem of Calculus
 - 19) Integration by substitution

Course Objectives

Any information above is tentative and may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see *Academic Policies* stated in the [catalog](#).

Part 1:

- 1) At the conclusion of this course, the student should be able to: Compute the limit of a function and evaluate indeterminate forms using L'Hôpital's Rule.
- 2) Determine the continuity of a function.
- 3) Find the derivative of a function as a limit.
- 4) Find the equation of a tangent line to the graph of a function.
- 5) Compute derivatives using differentiation formulas.
- 6) Use differentiation to solve applications such as related rate problems and optimization problems.
- 7) Use implicit differentiation and find derivatives of transcendental functions.
- 8) Graph functions using methods of calculus.
- 9) Evaluate a definite integral as a limit.
- 10) Evaluate integrals using the Fundamental Theorem of Calculus.
- 11) Apply integration to find areas.

Method of Evaluation

Part 1:

Students should demonstrate their mastery of the learning objectives and their ability to devise, organize, and present complete solutions to problems.

Examples of potential methods of evaluation include, but are not limited to, exams, quizzes, homework, classwork, technology-based activities, laboratory work, projects, and research demonstrations.

Methods of evaluation are at the discretion of local faculty

Special Materials Required of Student

Graphing utility, portfolio

Minimum Instructional Facilities

Smart classroom with whiteboards covering three walls, graphing utility overhead viewing panels, projection screen

Method of Instruction

- 1) Lecture and discussion
- 2) Teamwork

Out-of-Class Assignments

- 1) Reading: Lecture notes; assigned sections from the textbook; supplemental problem explanations; online graphing tool documentation (e.g. Desmos help pages, CAS tool guides); instructor-provided conceptual summaries and study guides. Students may also read articles or excerpts demonstrating real-world applications of calculus in physics, engineering, economics, and biology.
- 2) Writing/Problem Solving: Problem sets requiring students to show full mathematical reasoning using proper notation and explanation; written justifications of limit calculations using limit laws or the definition of derivative; error analysis and reflection on incorrect solutions; explanation of problem-solving strategies in multi-step applications; written solutions to group problem assignments; step-by-step documentation of computational methods used with technology (e.g. graphing calculators or computer algebra systems).
- 3) Other: Online homework using learning platforms (e.g. MyMathLab, WebAssign, or MyOpenMath); collaborative study activities using shared documents; constructing graphs by hand and with technology; reviewing and annotating instructor feedback to revise and improve solutions; exam preparation activities including practice tests and concept reviews; application-based projects modeling real-world data using derivatives and integrals; use of math software to explore numerical approximation methods.

Representative Texts, Manuals, OER, and Other Support Materials

A college level textbook designed for science, technology, engineering and math majors, and

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supporting the learning objectives of this course.

Representative texts:

- Strang, G., Herman, E., et al. (2016 & Web 2025). Calculus Volume 1. OER: OpenStax.
- <https://openstax.org/details/books/calculus-volume-1/>
- Stewart, J., et al. (2021). Calculus: Single Variable Calculus Early Transcendentals. 9th ed.: Cengage.

Cengage.

- Briggs, W., et al. (2019). Calculus: Early Transcendentals. 3rd ed.: Pearson.
- Hass, J., et al. (2023). Thomas' Calculus: Early Transcendentals. 15th ed.: Pearson.

Texts used by individual institutions and even individual sections will vary.

Exit Skills

Students having successfully completed this course exit with the following skills, competencies and/or knowledge:

- 1) Essential vocabulary and concepts of limits, continuity, differentiation, and integration.
- 2) Evaluating limits: algebraic, trigonometric, logarithmic and exponential functions
- 3) Limit Calculations using L'Hôpital's Rule and indeterminate forms.
- 4) Evaluating derivatives involving algebraic, trigonometric, logarithmic, exponential and inverse functions.
- 5) Implicit differentiation
- 6) Evaluating integrals: algebraic, trigonometric, logarithmic and exponential functions
- 7) Applying the Fundamental Theorem of Calculus.
- 8) Graphing: interpreting function behavior from derivatives
- 9) Modeling and applications such as related rates and relative extrema.

Student Learning Outcomes

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

- 1) Use analytical, numerical, or graphical methods to evaluate or interpret limits, derivatives, and integrals.
- 2) Apply differentiation or integration to solve interdisciplinary application problems and interpret the results in context.