

College of the Canyons, Fall 2024  
MATH 104: PRECALCULUS  
Sec 78676, 5 Units  
T,Th 11:00 AM – 1:25 PM, [MENH-249](#)

**INSTRUCTOR:** Roy W. Erickson, [roy.erickson@canyons.edu](mailto:roy.erickson@canyons.edu) and Mail Slot outside of Campus Mailroom.

**OFFICE HOURS:** TBD (probably before class)

**PRE-REQUISITES:** Trigonometry (Math 102) or equivalent.

**LEARNING OUTCOME:** 1) Analyze and graph polynomial, rational, logarithmic, exponential, and trigonometric functions. 2) Solve problems involving functions. {See more on the [Orientation Site](#) for this class.}

**WEIGHTING:** Comprehensive Final Exam 30%, Tests 50%, Homework & Classwork 15%, Notebooks 5%

*5 Tests are given, but the lowest is dropped. Thus, NO make-up tests are given so plan accordingly.*

**GRADING:** A: 100 – 90.0, B: 89.9 – 80.0, C: 79.9 – 70.0, D: 69.9 – 60.0, F: 59.9 – 0

**TENTATIVE SCHEDULE:** Fall 2024

W	Date	Tuesday	Thursday
1	20 Aug	Intro – 1.1 Functions – 1.2 Domain and Range	1.3 Rates of Change – 1.4 Composition
2	27 Aug	1.5 Transformations – 1.6 Absolute Value	1.7 Inverse Functions – 2.1 Lines – 2.2 Graphs
3	03 Sep	<b>Test 1</b> Ch 1 – 2 – Catch Up	3.1 Complex Numbers – 3.2 Quadratic Functions
4	10 Sep	3.4 Graphs of Polys – 3.5 Dividing Polynomials	3.6 Zeros of Polynomials
5	17 Sep	3.6 Zeros of Polynomials	3.7 Rational Functions
6	24 Sep	<b>Test 2</b> (Ch 3) – 4.1/2 Exponential Funct/Graphs	4.3 Log Functions
7	01 Oct	4.4 Graphs – 4.5 Properties	4.6 Solving Log Eqns
8	08 Oct	Ch 5 Trig Review	6.1 Graphs of Sine & Cosines – 6.2 More Graphs
9	15 Oct	6.2 More Graphs II – 6.3 Inverse Trig Functions	7.5 Solving Trig Eqns – 8.3 Polar Equations
10	22 Oct	<b>Test 3</b> (Ch 4 -7) – 8.4 Polar Graphs, 8.7 Parm Eqns	8.7 Parametric Graphs – 8.4 Polar Graphs
11	29 Oct	9.1 2-Dim Linear Systems – 9.2 3-Dim Linear Sys	9.2 3-Dim Lin Sys II Gauss-Jordan Elimination
12	05 Nov	9.3 Non-Linear Sys - 9.4 Partial Fractions	9.5 Matrix Ops – (9.6 Aug Matx) – 9.7 Inv Matx I
13	12 Nov	<b>Test 4</b> (Ch 8,9,10) – 9.7 Inv Matx II – 9.8 Cramers	10.1 Ellipses – 10.2 Hyperbolas
14	19 Nov	11.1 Sequences – 11.2 Arithmetic Sequences	<i>Thanksgiving</i>
15	26 Nov	11.3 Geometric Sequences – 11.4 Summations	11.6 Binomial Theorem – Induction
16	03 Dec	<b>Test 5</b> (Ch 11 & Induction)	<b>Comprehensive Final Examination</b>

Last Day (estimated) to: Drop w/ Refund: 01 Sep, Drop w/o 'W': 01 Sep, Drop w/ "W": 09 Nov ver.4

**HOMEWORK:** After the lecture of each section consider the HW to be assigned, even if it was not formally announced (ask if in doubt). Work the problems listed in the HW Syllabus. E-mail a fellow student should you miss class as I do not always recall the details from class to class (I teach other classes and work a part-time day job :) **Assigned HW is due at the break of Tuesday's class!** Late HW is NOT accepted under any circumstances! Each problem will be given a grade of 0 or 1 based primarily on completeness. Short quizzes may be given at random based on homework problems. They count as part of the homework category but carry a heavier weight.

**WORKLOAD:** You are expected to work 2 hours out of class for each hour in class – manage your school, work, sports, social, family and volunteer time carefully!

**HOMEWORK GUIDELINES:** All homework turned in for credit must follow a specific set of style rules summarized in the handout “Homework Guidelines.” This applies not just to HW, but test and quiz questions. These are similar to rules handed out in English classes. Basically the guideline asks the following -

- \* HW must be properly labeled and stapled by the section to be accepted.
- \* Every HW assignment starts on a new page and needs class, title and name along the top.
- \* *Please DO NOT staple multiple sections together.*
- \* No two column layout - use full width of the page.
- \* All work is done on white or engineering pad paper.
- \* Feel free to use both sides of the page. ( See [mymathmantra.com](http://mymathmantra.com) → [homework](#). )

**TLC:** Homework, concept, and test preparation help is available at [The Learning Center](#), located next to the Library. However, [MESA](#) may be a better option for this class. Group study is highly encouraged! You may find [Professor Leonard](#), [Khan Academy](#) and [Paul’s Math Notes](#) to offer you some internet help.

**DISTRACTIONS:** Late students create an unnecessary distraction, so it is your responsibility to your classmates to arrive on time. *Once in class* - stow all electronic devices. You may be asked to leave class if you are texting or using your cell/tablet/computer in class. *At home* - place your cell phone in the next room while studying, visiting it 10 minutes at the end of each hour. Turn off your TV, youtube, GF or BF. Turn aggressive classical music on while studying - it wires the brain for math. Remember, some people study best in the mornings. Avoid heavy foods before class. Drink plenty of *water, eat almonds, raisins, yogurt, veggies* to combat tiredness.

**INCOMPLETES:** Incompletes (I) are given only for serious and verifiable reasons. You must also have a current grade of C or greater when requesting one.

**GRIEVANCES:** If you have any complaints or grievances about the class or your treatment in it, **talk to me first**, so that we can work out any issues.

**CHEATING** results in a zero on the element being tested on. If seating allows for it we sit every other seat during the exam period. I reserve the right to rearrange people during the tests. *No restroom breaks! No smart devices (eyewear, pen, watches) are allowed on or above the desktop. I will be spot-checking all papers.* Acts of [academic dishonesty](#) will be forwarded to the Office of the Dean of Students, whose personnel will determine appropriate sanctions.

**DISABILITIES:** Students with a verified disability who may need reasonable accommodations for this class are encouraged to notify the instructor and contact the [Academic Accommodation Center](#) as soon as possible. *All information will remain confidential.* I will do my best to accommodate any disability that any student may have.

**DROPPING THE CLASS:** Failure to be in class more than 3 times (on 4th absence) may result in being dropped from the course (until drop deadline). Dropping *after* Week 2 will result in a “W” on your transcript. **Effective July 1, 2012** students have only 3 attempts to pass a class per state sponsored institution. A grade of "D", "F", "I", or "NP" in a class, or a "W", will count as an attempt. Should you decide not to attend class any further you are responsible to [drop](#) yourself from the class by the drop deadline.

**REQUIRED TEXT:** *Precalculus 2e* by Abramson, Openstax, ISBN-13: 978-1-938168-34-5 [CoC Bookstore](#) for Hardcover (Recommended by Instructor – not free) or [Digital](#) (free web access).

**CALCULATOR:** On those tests allowing a calculator, *NO electronic device, graphing calculators or other big fat programmable calculators are allowed.* Instead you may use a basic scientific such as the [TI-30XA](#) or equivalent.

**THE NOTEBOOK:** In the last three years of my 10 years of college, I finally figured out what to take my notes in: [The Composition Book!](#) ( I prefer college rule.) They wear well, they are not overly large and the pages are sewn in. Give it a try! I have returning students coming by and thanking me for the idea. They use them in all their classes, technical or not. See [mymathmantra.com](http://mymathmantra.com) → [Notebook](#).

## **Additional College of the Canyons Resources**

### **Degree information**

Recent California Legislation guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer”. To learn the difference between AS and AS-T, and for more information on the suggested sequence of classes to be taken, in order to obtain these degrees in two years, as well as information on when these courses are offered, please visit and click on ‘Degrees’:

<https://www.canyons.edu/academics/schools/mathscience/mse/index.php>

### **Canvas**

This course can be accessed on the first day of class via Canvas at <https://coc.instructure.com>. Log into Canvas using your CanyonsID single sign-on:

- CanyonsID Username is your COC student email address (Ex: username@my.canyons.edu)
- CanyonsID Password is your COC student email password

Please visit the [Get to Know Your Online Classroom](#) page for help logging into Canvas and for tips on using Canvas and Zoom. [Canvas Chat Support](#) is also available 24/7 for any Canvas related issues.

### **Online Education**

Check out the [Online Education website](#) for more information on a variety of topics that can help you be a successful online student such as: exam proctoring, learning styles, computer skills, and tips for student success. If this is your first online course, feel free to take our online learning readiness assessment to assess your skills.

### **The Learning Center (TLC)**

The TLC provides FREE [online tutoring](#) resources to COC students! Advanced Math students should checkout MESA.

### **Academic Accommodations Cent (AAC)**

College of the Canyons AAC provides educational services and access for eligible students with documented disabilities who intend to pursue coursework at COC. A variety of programs and services are available which afford eligible students with disabilities the opportunity to participate fully in all aspects of the college programs and activities through appropriate and reasonable accommodations. For more information on their services visit the [AAC](#).

### **Online Counseling**

The Counseling Department offers appointments online. You can schedule an appointment by visiting the [Online Counseling website](#). Counselors can help you map out a plan to reach your educational goals as well as advise you on course selection and registration.

### **Management of Stress and Mental Health**

College of the Canyons cares about your emotional and physical health. Learn more about the broad range of confidential student services, including free counseling and mental health services available during this time by visiting the [Student Health & Wellness Center website](#) or by calling them at: 661-362-3259.

The National Suicide Lifeline number is 1-800-273- 8255 (TALK). Please call it if you or someone you know is having thoughts of suicide or is in severe distress - it could save someone's life.

You can also use the Crisis Text Line: Just text "Courage" to 741741. It's free, available 24/7, and confidential.

### **Veterans Resource Center**

The College of the Canyons Veterans Resource Center is a department within the Student Services Division at the college, created to help veterans and veteran dependents with applying to College of the Canyons, enrolling in classes, and requesting VA Education or Vocational Benefits. For more information please visit the [Veterans Resource Center website](#), email [veterans@canyons.edu](mailto:veterans@canyons.edu) or phone (661) 362-3469.