College of the Canyons, Summer 2024 Math 211 CALCULUS I Lecture Sec 77407 5 Units M,T,W,Th 6:30 PM – 9:20 PM, Mentry 249

INSTRUCTOR: Roy W. Erickson, Primary contact: CANVAS inbox primary (two days to respond) Secondary Contact: roy.erickson@canyons.edu secondary (one week to respond).

OFFICE HOURS: After class for 30 minutes (further time slots to be determined as needed).

RECOMMENDED PRE-REQUISITE: Math 104 Precalculus

SUBJECT MATTER (SLO): Analyze and solve problems using elementary derivatives and integrals. Calculus I introduces limits, derivatives, and integrals, as well as applications including rate of change, maxima-minima, curve sketching, and area problems.

WEIGHTING: Comprehensive Final Exam 25%, 5 Tests 60%, Classwork & Homework 15%,

Note: 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

Wk	Date	Monday	Tuesday		Wednesday	Thursday
1	10 Jun	Introductions	1.5 The Limit of a Function	1.7	Delta-Epsilon no HW	2.1 Derivatives Rates of Change
		1.4 Tangent and Velocity	1.6 Calculating Limits	1.8	Continuity	
2	17 Jun	TEST 1	2.3 Derivative Formulas			2.5 The Chain Rule
		2.2 Derivative as Funct'n 	2.4 Trig Derivatives	Ju	inetheenth Holiday	
3	24 Jun	2.6 Implicit Differentiation	2.8 Related Rates		TEST 2	3.2 Mean Value Theorem
		2.7 Applications	2.9 Linear Approximations	3.1	Max & Min Values	3.3 Derivatives and Shape
4	01 Jul	3.4 Limits at Infinity	3.5 More Curve Sketching	3.8	Newton's Method	
		3.5 Summary of Curves	3.7 Optimization	3.9	Antiderivatives	July 4 th Holiday
5	08 Jul	TEST 3	4.2 Definite Integral pt1	4.3	Fund. Thm of Calc	4.4 Indefinite Integrals
		4.1 Areas and Distances	4.2 The Definite Integral pt 2			
6	15 Jul	4.5 Substitution	TEST 4	5.3	Cylindrical Shells	5.4 Application: Work
		5.1 Areas between curves	5.2 Volumes			
7	22 Jul	5.5 Ave Value of Functions	5.5 Ave Value of Functs	6.2	Deriv'tvs of Expontl	6.3 Logarithmic Functions
			6.1 Inverse Functions			-
8	29 Jul	6.4 Derivatives of Logs	TEST 5			
		I	Review		Review	COMPREHENSIVE FINAL EXAM

TENTATIVE SCHEDULE: Summer 2024

Last Day (estimated) to: Drop w/ Refund: 12 Jun, Drop w/o 'W': 19 Jun, Drop w/ "W": 22 Jul v.2

TEST GRADING: Tests frequently are 'busy' - meaning lots of work to do on them. (It can be hard to gauge the length of time needed to complete even the simplest appearing problems.) The prepared student will complete the bulk of the test but the unprepared student will struggle to finish. I scale the test based on the highest score. If, for example, on a 100 point test the high score is 90 I will enter 93 in the grade book as that exam's maximum score. This scaling accounts for there being too many problems, or too difficult of problems, or insufficient coverage of the material, etc. If a student scores above the 'scaled maximum score'- they will receive extra points towards their overall Exam category.

WORKLOAD: This class will require a major time and effort commitment. Plan on spending at least an hour or two each night studying and working HW problems. This class is 5 units, which means you should be spending a lot more time on it than the typical 3 unit class. DO NOT FALL BEHIND! It is very difficult to catch up in math classes as each chapter builds on the previous chapters – stay on top of things. Ask for help (TLC or from my Office Hours) if you are confused about anything. DO NOT ASSUME YOU WILL FIGURE IT OUT LATER (CRAMMING)!

HOMEWORK: After the lecture of each section <u>consider the HW to be assigned</u>, 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 I work a part-time day job). **Assigned HW is due at the** *break* of Monday's class and, for those sections covered the week before! Late HW is <u>NOT accepted</u> <u>under any circumstances!</u> Each problem will be given a grade of 0 or 1 based primarily on completeness.

HOMEWORK GUIDELINES: In order to receive credit for homework, tests, and projects your work must follow a specific set of style rules summarized in the handout "Homework Guidelines." These are like the rules in English classes. See mymathmantra.com \rightarrow homework for examples. A synopsis follows:

- * HW must be properly labeled and <u>stapled by the section</u> 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 8.5 x 11.0 white paper or approved engineering pad paper.
- * Readable: Neatly written and organized layout of your work

My grader and I are not obligated to grade any type of work, including exam work, failing to follow these guidelines.

Messy work reflects on your own self-respect as well as your respect towards those who must read it.

DISABILITIES AND GRIEVANCES: Students with a verified disability who may need reasonable accommodations for this class are encouraged to notify the instructor and contact <u>disabled students and services</u> (see AAC below) as soon as possible. *All information will remain confidential.* I will do my best to accommodate any disability that any student may have. Should you have any complaints or grievances about the class or your treatment in it, talk to me first, so that we can work through 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 examination period. I reserve to right to rearrange people during the tests. *No restroom breaks!* Three Strikes: 1-"Eyes on your own paper," 2- I tap your desk (private chat), 3- I take your exam and put a Zero on it. Further cheating warrants a visit to the Dean, the results of which could be expulsion from CoC!

DISTRACTIONS: Late students create an unnecessary distraction, so it is your responsibility to your classmates to arrive on time. *Once in class* - stow all devices. You may be asked to leave class if you are texting or using your device in class. *At home* - place your device in the freezer while studying, visiting it 10 minutes <u>at the end</u> of each hour. Turn

off your TV, youtube, GF, BF or BFF. Turn on aggressive classical/progressive music - it wires the brain for math. Some people study best in the mornings – know your learning style. Avoid heavy foods before class and study time. Drink plenty of water and eat almonds, raisins, yogurt, veggies to combat tiredness. You are what you eat! Go for a walk before class.

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.

TUTORING: Group study outside of class is cautiously encouraged (wear a mask – social distance). Tutors are available at <u>The Learning Center</u>. MESA and TLC is a valuable asset to the campus – use them!

DROPPING THE CLASS: <u>I will drop you</u> if you miss three lectures without notifying me. Dropping after the posted drop date will result in a "W" on your transcript. **Effective July 1, 2012** students have only 3 attempts to pass a class per college. A grade of "D", "F", "I", or "NP" in a class, or a"W" counts as an attempt.

REQUIRED TEXT: Calculus; by Stewart; 8th ed. ISBN: 978-1-285-74062-1 ©2015 Pearson

((Note: The HW part of each section is almost identical between 7th and 8th editions of the textbook, and if you search online, you should be able to find really <u>inexpensive used copies</u> for purchase. Digital copies are available but they may not match your learning style. I for one need paper textbooks so I can place one finger in the current section I'm studying then quickly search up past procedures and then go back and forth as needed.))

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 really 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. Even their professors have commented on them. Trim and tape in the Syllabii, TOC, HW Log, day-to-day notes, handouts (trimmed down), etc. ((See <u>mymathmantra.com</u> \rightarrow <u>Notebooks</u> for examples.))

Additional 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 <u>https://coc.instructure.com</u>. 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 <u>Get to Know Your Online Classroom</u> page for help logging into Canvas and for tips on using Canvas and Zoom. <u>Canvas Chat Support</u> is also available 24/7 for any Canvas related issues.

The Learning Center (TLC)

The TLC provides FREE <u>online tutoring</u> resources to COC students! Advanced Math students should checkout MESA.

Academic Accommodation Center (AAC): The College of the Canyons <u>Academic Accommodation Center</u> (AAC) provides educational services and access for eligible students with documented disabilities who intend to pursue coursework at COC. Various programs and services allow eligible students to participate fully in all aspects of college programs and activities through appropriate and reasonable accommodations. For more information on their services, visit the AAC website or email them at <u>AAC@canyons.edu</u>. Students in the AAC program should supply an appropriate document at least a week before an exam so that I can make arrangements for needed accommodations.

Academic Counseling: The Counseling Department offers academic counseling appointments. Counselors can help you design a plan to reach your educational goals and advise you about course selection and registration. To schedule an appointment, visit the <u>Counseling Office website</u>.

Management of Stress and Mental Health: Often the pressure on our students is very strong, involving academic commitments, relationships, outside jobs and family pressure to name a few. The staff and faculty of College of the Canyons are here to see you succeed academically and care about your emotional and physical health. You can learn more about the broad range of confidential student services, including counseling and mental health services available on campus by visiting the Student Health & Wellness Center in the Student Services Building (across from the bookstore) or by clicking on <u>Student Health & Wellness Center</u>. You can email them at <u>StudentHealthCenter@canyons.edu</u>, or call the phone number (661) 362-3259. Also, the National Suicide Lifeline number is 988. You can call it if you, or someone you know, is having thoughts of suicide or is in severe. You can also call the Crisis Text Line: Just text "Courage" to 741741. It's free, available 24/7, and confidential. A website about mental health resources in the Santa Clarita Valley area can be found at <u>Be the Difference SCV</u>.

Veterans Resource Center: The College of the Canyons Veterans Resource Center helps veterans and their dependents apply to the College of the Canyons studies program, enroll in classes, and request VA Education Vocational Benefits. For more information, visit the <u>Veterans Resource Center website</u>, email them at <u>veterans@canyons.edu</u>, or call (661) 362-3469.