

Calculus I, Fall 2022, MAT K254, Tuesday and Thursday from 5:00 – 6:40 Room D215

Professor Tony Baker

Prerequisite: MAT 186, Precalculus

Text: Calculus Early Trans Multi Term Enh Web Assign Acc

Course description: Introduces functions, continuity, limits, derivatives of algebraic and early transcendental functions, antiderivatives, definite integrals, and their applications. Uses graphing calculators to enhance and broaden the range of concepts and applications discussed.

Measurements: Participation - 10%, 4 tests, each – 15%, and final exam - 30%.
Grade equivalents: A 93 – 100, A- 90 – 93, B+ 87 -89, B 83 – 86,
B- 80 – 82, C+ 77 – 79, C 73 – 76, C- 70 – 72, D+ 67 – 69. D 63 – 66,
D- 60 – 62, F below 60, N if the student completed less than 60% of work

Attendance: It is very important that you attend **ALL** classes. Your attendance in the classroom, participation in classroom work /projects and preparation for each class is required and is essential to your success in the course.

Support Services: Tutorial services. Meeting with me for extra help.

Office Hours: T, R 7:00pm to 8:00pm (by appointment only)
E-mail tbaker@trcc.commnet.edu

Class Cancellation: In case of inclement weather, check the college website for class cancellations or call 860-215- 9000 for a recorded message on the college phone.

Plagiarism and Academic Honesty:

At TRCC, we expect the highest standards of academic honesty. The Board of Trustees' Proscribed Conduct Policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism.

Alert System: MyCommNet Alert is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. All students are encouraged to sign up for MyCommNet Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site(see the link below).

http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html

Course Outline, Schedule, Homework (Odd problems)

Date	Section
8/30/2022	Functions and Their Representations. A Catalog of Essential Functions. Sect. 1.1, 1.2, 1.3, 1.5, 1.6
9/1/2022	The Limit of a Function Section 2.2
9/6/2022	Calculating Limits Using the Limit Laws Section 2.3
9/8/2022	Continuity Section 2.5
9/13/2022	Limits at Infinity; Horizontal Asymptotes Section 2.6
9/15/2022	No Class
9/20/2022	TEST Chapter 1 and 2
9/22/2022	Limits to Derivatives Section 2.7 and 2.8
9/27/2022	Derivatives of Polynomials Section 3.1
9/29/2022	The Product and Quotient Rules Section 3.2
10/4/2022	Derivatives of Trigonometric Functions Section 3.3
10/6/2022	The Chain Rule Section 3.4
10/11/2022	Implicit Differentiation Section 3.5
10/13/2022	Derivatives of Logarithmic Functions Section 3.6
10/18/2022	Rates of Change in the Natural and Social Sciences Section 3.7
10/20/2022	Related Rates and Linear Approximations Section 3.9 and 3.10
10/25/2022	Review Chapter 3
10/27/2022	TEST Chapter 3
11/1/2022	Max and Min Values and The Mean Value Theorem Section 4.1 and 4.2
11/3/2022	How Derivatives Affect the Shape of a Graph Section 4.3
11/8/2022	Summary of Curve Sketching Graphing with Calc. Section 4.5 and 4.6
11/10/2022	Optimization Problems Section 4.7
11/15/2022	Newton's Method Section 4.8
11/17/2022	TEST Chapter 4
11/22/2022	Antiderivatives and Areas and Distances Section 4.9 and 5.1
11/29/2022	The Definite Integral Section 5.2
12/1/2022	The Fundamental Theorem of Calculus Section 5.3
12/6/2022	Indefinite Integrals and the Substitution Rule Section 5.4 and 5.5
12/8/2022	TEST Chapter 5
12/13/2022	Review for Final Exam
12/15/2022	Final Exam