MATH 5A: CALCULUS I
SPRING 2022

Instructor Information

- Mrs. Kelsey Casteel
- When you need to get in contact with me, please message me through the Canvas messaging system. When you are in Canvas click on the "inbox" tab on the main left hand side menu. If Canvas is down (fingers crossed that never happens), then please email me @ kelsey.casteel@reedleycollege.edu
- Campus office hours: Mondays and Wednesdays from 11:30 am to 12:20 pm in the Math and Science Building (where the Math Center is) office 133. I am also available to meet online via Zoom. If you would like to schedule a zoom session with me, please send me a message through Canvas and we will schedule it and I will send you the meeting information.

Course Information

Welcome to Math 5A, your first semester of calculus! Our course section number is 53345. This class lasts from Monday January 10th through Friday May 20th . We meet Mondays, Wednesdays, and Fridays from 8:30 – 9:55 am in CCI 201.

Course Description

Calculus I is the first course in differential and integral calculus of a single variable. Topics include functions, limits and continuity, techniques and applications of differentiation and integration, and the Fundamental Theorem of Calculus.

- Advisories: English 1A or English 1AH
- Prerequisite(s): Mathematics 3A or equivalent and Mathematics 4A or equivalent
- Units: 5

Course Materials

- The majority of assignments are through an online platform called MyOpenMath, which is completely FREE to you! You won't need to make an account or sign up for anything – everything is integrated into Canvas.
- Scientific Calculator – cannot be a graphing calculator, feel free to check with me before making a purchase. I recommend the TI 30X IIS
- The textbook used for this course is a completely FREE textbook that I have customized. It is based on the OpenStax book *Calculus Volume I.* The textbook is integrated into the modules in Canvas and there is also a link that will take you to the full textbook.

Student Learning Outcomes

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

- Evaluate limits using graphical, analytical, and tabular techniques.
- Calculate and interpret the derivatives of algebraic, trigonometric, and transcendental functions.
- Translate problems from the physical, life, and social sciences into mathematical models and apply appropriate techniques to solve
- Calculate the integrals of algebraic, trigonometric, and transcendental functions.

Course Objectives

In the process of completing this course, students will:

- Compute the limit of a function at a real number
- Determine if a function is continuous at a real number
- Find the derivative of a function as a limit
- Find the equation of a tangent line to a function
- Compute derivatives using differentiation formulas
- Use differentiation to solve applications such as related rate problems and optimization problems
- Use implicit differentiation
- Graph functions using methods of calculus
- Evaluate a definite integral as a limit
- Evaluate integrals using the Fundamental Theorem of Calculus
- Apply integration to find area

Grading

You can see your individual assignment grades and overall class grade anytime in Canvas. Your overall class percentage is broken down as follows:

- Exams (including mandatory cumulative final exam): 60%
- Assignments: 20%
- Quizzes: 10%
- Discussions: 10%

How does this actually work? Say that at the end of the class you have the following percentages in each category: 82% in exams, 70% in assignments, 85% in quizzes, and 90% in discussions. Your overall class percentage is calculated as follows:

$$.60*82 + .20*70 + .10*85 + .10*90 = 49.2 + 14 + 8.5 + 9 = 80.7\%$$

Letter grades given according to the following intervals:

89.5 - 100% A

79.5 - 89.4% B

69.5 - 79.4% C

59.5 - 69.4% D

0 - 59.4% F

Assignments/Quizzes/Discussions

Assignments and quizzes are set up through MyOpenMath with direct access through Canvas (you will NOT need to set up any sort of account outside of Canvas). In assignments, you will have unlimited time on each question and can reset the question as many times as you need. The quizzes are timed with only one attempt per question. You can retake the quizzes as many times as you like and your best score will be saved. Discussions are posted using the discussion feature in Canvas. You will see all assignments, quizzes, and discussions organized in the modules. Your grades are constantly upgraded as you work on assignments. It may take some time for the system to sync the grades, so do not panic if you finish something and do not instantly see the correct grade in the gradebook.

Extra Credit

There are no extra credit opportunities available for this class.

Exams

The content of the course is divided into four exams that will take place in class. You will know at least a week ahead of time of when each exam will take place. **If you have testing accommodations through the DSP&S office, please talk with me as soon as possible. **You can take one exam late if needed.**

Final Exam

There will be a **mandatory** cumulative final exam at the end of the class. It will contain questions from throughout the semester.

Late Work

Any assignment, quiz, or discussion that is done after the due date will be awarded only 70% of the credit. As an example, if a discussion is worth 10 points and you respond late, you can earn up to 7 points.

Technology

As a student of SCCCD, you are given a free student email account. Make sure you are able to login to this account and check it on a regular basis (at least once a day). You can also set it up through your smart phone if you have one and set up email alerts so that you never miss anything important. Your student email is the official way your instructors communicate with you outside of class. In addition to your email account, you

also have a Canvas account set up by the college. Everything for our course will be available in the Canvas shell.

Access to reliable internet is **mandatory** for success in this class. If you do not have access to the internet from home, you need to figure out places you can go to work. ***Not having access to the internet is not an excuse for incomplete work.***

Drop Policies

If you miss 6 consecutive class meetings (2 weeks) without communicating with me I will assume you are no longer interested in the class and will drop you. If you desire to drop the course, you can do so through Webadvisor. See the important dates section for more information.

College Policies

Accommodations for Students with Disabilities

If you have a verified need for an academic accommodation or materials in alternate media (ie: Braille, large print, electronic text, etc.) per the American With Disabilities Act or Section 504 of the Rehabilitation act please contact me as soon as possible.

Academic Dishonesty

``Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences" (Reedley College Catalog pg 49).

Cheating

``Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's

permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely" (Reedley College Catalog pg 49).

Student Rights

``Student rights are protected by federal and state laws, and by policies established by the trustees of the State Center Community College District. It is therefore essential for the protection of students' rights that procedures be established and followed which would identify violations of student conduct standards and the resolutions of such violations. Students have a right to an oral or written notice (reasons for disciplinary action), an opportunity for a review, and a decision given orally or in writing. For more information contact the

Vice President of Student Services' office. (Board Policy 5520, Administrative Regulation 5520)" (Reedley College Catalog pg 49).

Important Dates

- Monday January 10th – first day of class
- Monday January 17th – Martin Luther King, Jr. Day observed, no classes, campus closed
- Friday January 21st – last day to drop a full-term class for a full refund
- Sunday January 30th – Last day to drop the class to avoid a "W" (withdrawal)
- Friday February 18th – Lincoln Day observed, no classes, campus closed
- Monday February 21st – Washington Day observed, no classes, campus closed
- Friday March 11th – Last day to drop the course to receive a "W" instead of a letter grade (you are dedicated to a letter grade if still enrolled after this date)
- April 11 – 15 – Spring Break, no classes, campus is open Monday through Friday
- Friday May 20th – Last day of class!

*** This syllabus is subject to change at the discretion of the instructor ***