



MATH 5A: MATH ANALYSIS I (AKA CALCULUS I)
FALL 2020

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
- Office hours are via Canvas messenger or Zoom. Every Thursday from 11:00 am – 12:00 pm there is a Q&A zoom session (the zoom meeting information is on the calendar in Canvas). If you would like to schedule a one-on-one 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! Our course section number is 55058. This is a 100% online class, which means you will NEVER be required to come to campus. This also means you need to be determined to stay on top of deadlines and make time in your schedule for this class. This class lasts from Monday January 11th through Friday May 21st. Any zoom meetings for this course will be optional with the recordings posted afterwards.

Course Description

Introduction to calculus, analytic geometry, differentiation and integration of polynomial, exponential, logarithmic and trigonometric functions; limits; curve sketching and applications.

- Advisories: Eligibility for English 1A
- Prerequisite(s): Mathematics 3A or 4B AND Mathematics 4A
- Credits: 5

Course Materials

- Required: Online MyLab access. MyLab is an online platform by Pearson. You will set up your account THROUGH our Canvas page by clicking on the tab “MyLab and Mastering” on the left side menu. There are different purchasing options. If you only need to take Math 5A and none of the other classes in the sequence (Math 5B and Math 6) then you are fine with an 18 week access option. If you plan on taking more classes in the sequence, then I would purchase a 24 month access option. If you are not sure of which option, you can start with a free 14 day access. This option is a link at the bottom of the purchasing page when you set up your account. You DO NOT need a hard copy of the book. The

cheapest option will be to purchase access online during the set up process. If you have a bookstore voucher, you can by an access code through the bookstore.

- Scientific Calculator - there are several hand held models that are great, but I recommend using the Desmos scientific/graphing calculator (completely FREE!). Here is a link to the scientific calculator: <https://www.desmos.com/scientific> , and here is a link to the graphing calculator: <https://www.desmos.com/calculator> . If you have a smartphone, you can also download the desmos app for free. If you want to check on a handheld model, please send me a message.
- The textbook used for this course is *Calculus Early Transcendentals* 3rd edition by Briggs, Cochran, Gillett and Schulz. The MyLab access comes with the online eText. You are NOT required to have a hard copy of the 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:

- Analyze and sketch the graphs of simple functions.
- Determine the domain and range of compound and composite functions.
- Calculate limits and determine the continuity of functions.
- Find the derivative of a function as a limit
- Differentiate polynomial, trigonometric, rational, exponential, and logarithmic functions.
- Solve related rates and extrema problems using the derivative.
- Evaluate a definite integral as a limit.
- Perform calculations using the Fundamental Theorem of Calculus.
- Perform indefinite and definite integration including the use of substitution.

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 MyLab. In assignments, you will have unlimited time on each question and can reset the problem 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 laid out in the modules.

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 only earn up to 7 points.

Extra Credit

There are no extra credit opportunities available for this class.

Exams

The content of the course is divided into four exams. The exams are timed and you have only ONE attempt at each exam. You can take ONE exam late and must be completed within 48 hours of the original due date. **If you have testing accommodations through the DSP&S office, please talk with me as soon as possible.

Final Exam

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

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

You will be dropped from the course if any of the following occur:

- Not responding to the "Introduce Yourself" discussion post by Wednesday January 13th at 11:59 pm.
- Not completing the syllabus quiz by Wednesday January 13th at 11:59 pm.
- Not having paid, full MyLab access by Friday January 29th at 11:59 pm
- Falling two weeks behind in terms of due dates.

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 11th – first official day of class
- Wednesday January 13th – must complete introduce yourself discussion and syllabus quiz by 11:59 pm.
- Monday January 18th – Martin Luther King, Jr. Day (no office hours, campus is closed)
- Friday January 22nd – Last day to drop the class to receive a full refund
- Friday January 29th – Must have full, paid access to MyLab
- Sunday January 31st – Last day to drop the class to avoid a “W” (withdrawal)
- Friday February 12th – Lincoln Day observance (no office hours, campus is closed)
- Monday February 15th – Washington Day observance (no office hours, campus is closed)
- Friday March 12th – 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)
- Monday March 29th – Friday April 2nd – Spring Recess (no office hours, campus closed on Friday)
- Monday May 17th – Friday May 21st – Final Exams Week. **The final exam and any late work are due by Friday May 21st at 11:59 pm.**

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