Math 3A, Calculus & Analytical Geometry
Section 30547, Spring 2021, 5 units

Class Meetings
This class meets MTWR 9:20 am – 10:30 am synchronously using Zoom, from February 1 to May 20, and on May 26 from 9:40 – 11:40 am for the final exam. There is a link in the Canvas Calendar that will take you to each class session. You are expected to be present at each Zoom session and you can be dropped from the course for missing 10% of the classes. If you require some flexibility in attendance, please contact me. For more course information, please login to Canvas.

Use of video by students during our Zoom class is encouraged so that our sense of connection and community may be enhanced. It is OK if you need to turn off your camera or do not have one. I trust that you will be connected and participating even when we cannot see you. Please be sure to upload your photo or another image that represents you to your Zoom identity so that we can better connect when your camera is off.

Information about your Instructor
• Instructor: Betty Weiss
• WVC Faculty webpage for Betty Weiss

Communication Plan
• You can reach me by email or by using the Canvas Inbox and I will respond within 24 hours, often sooner. Remember to let me know your name and what class you are in.
• You can leave voicemail at (408) 741–2596. Include your full name and what class you are in.
• You can also email me from within the MyMathLab homework system, which is helpful if you want me to see the exact problem you were working on.
• Student hours to meet with me one-on-one are MW 11 am-12 noon, and Tuesdays 3-4:30 pm. To visit, go to the Canvas Calendar and click on Student Hours to join the virtual session.
• I will grade and give you feedback on any exam work submitted in Canvas within one week, often sooner. MyMathLab homework and quizzes are graded immediately.
• Please check Canvas at least once a week to see class announcements, or even better, set your Canvas notification preferences to receive class announcements as email or texts.

Why Take Math 3A?
Calculus is the study of how things change, giving you the ability to model, predict, and learn to control systems in which change occurs, such as motion on a racetrack or the spread of a pandemic. It can help prepare you for future math coursework including Math 3B and Math 4A as well as for coursework in physics or engineering. A strong calculus background is important for many careers, including business, architecture, and the STEM fields.

Required Materials
• Purchase access to MyMathLab (this includes an electronic textbook and access to homework, quizzes and videos). Register for a MyMathLab account and use the CourseID weiss28009
• You will need a graphing calculator.
Graded Coursework

- **Homework:** You will be doing your homework online through MyMathLab. It will help with your questions, allow you to view examples, and give you instant feedback on your graded answers. Homework will not be timed, but there is a 10% per day penalty on late homework problems. Due dates will be shown in MyMathLab; expect to have homework due twice a week, on Tuesdays and Thursdays, starting Feb. 4. On exam days, there will not be homework due.

- **Quizzes:** You will be taking 9 quizzes online through MyMathLab, which will give you instant feedback on your graded answers. Quizzes will be timed (40 minutes), and you will get two tries for each quiz. There is a 10% per day penalty on late quizzes. Due dates will be shown in MyMathLab, but expect to have a quiz due every Sunday, except right after an exam. The lowest two quizzes will be dropped from your Canvas gradebook.

- **Discussion forums:** We will have some graded Canvas Discussions. Check early each week (before Wednesday) to see what that week’s discussion is about and make an initial post. Check back later in the week (Wednesday to Sunday) to read other’s posts and reply.

- **Exams:** You will be downloading a total of 4 timed exams and completing them in Zoom during four of our scheduled class sessions. The exam dates are February 18, March 11, April 8, and April 29. You will be asked to scan or take a photo of your written work and submit it in Canvas, in pdf format as one file. Contact me in advance if you are not able to make one of these dates. If you miss one exam with a valid excuse, I will replace that exam score with your final exam score.

- **Final exam:** The cumulative final exam will be taken during the final exam Zoom session, Wednesday, May 26, 9:40–11:40 am. You will submit work in Canvas for the final exam.

**About due dates:** Due dates are very important, both to help you keep on track to learn the material and to be fair to all students. However, if you have extenuating circumstances let me know as soon as possible. We can work together to find solutions if you are not able to meet certain due dates.

**Grading**

Your grade will be a weighted average of homework (20%), quizzes (15%), discussion forums (10%), exams (40%), and the final exam (15%). The grade scale will be 90–100% A, 80–89% B, 70–79% C, 60–69% D, 0–59% F. Grades will be recorded in the Canvas gradebook; check there to track your progress.

**Accommodations for a Disability**

West Valley College is here to support you, and we want to make all learning experiences as accessible as possible. If you think you may run into academic barriers because of your disability (including permanent disabilities or chronic or temporary medical conditions), please let me know so we can privately discuss your options and create a plan that works for you. You may also want to register with the Disability and Educational Support Program (DESP). West Valley College’s DESP program is known for going the extra mile to support students, and they will work with you to establish reasonable accommodations for qualifying disabilities.

**Disability and Educational Support (DESP) Contact Information**

The [DESP office](http://www.westvalleycollege.edu/desp) is in the Student Services building. Their phone number is (408) 741-2010 (voice) or (408) 741-2658 (TTY).
Student Help and Support

West Valley College has many Student Services to support your success and help you achieve your goals. College students often experience issues that may interfere with academic success such as stress, juggling responsibilities, life events, relationship concerns, sleep problems, or feelings of anxiety, hopelessness, or depression. All of us benefit from support during times of struggle – you are not alone. Helpful, effective resources are available for all students, and an important part of the college experience is learning how to ask for help. Getting help is the smart and courageous thing to do – for yourself, and for those who care about you.

- You can learn more about the broad range of confidential, mental health services for students on the Health Services webpage, including tele-mental health, anonymous online screenings, trainings and resources such as TAOConnect and Kognito, and online/local information and resources.
- National Suicide Prevention Lifeline (800) 273-TALK (8255)
- National Crisis Text Line: text “COURAGE” to 741741

Learning Support/Tutoring

West Valley College’s Success Center and Math Resource Center offer FREE tutoring! Visit their websites for more information about tutoring support available to you online. To receive free tutoring through the Math Resource you must add the free 0-unit course LRSV 110M, CRN 31599 through the Portal. NetTutor in Canvas is also a free online tutoring service available 24/7.

Course Information

Catalog Description:
This is a first course in differential and integral calculus of a single variable: functions, limits and continuity, techniques and applications of differentiation and integration, Fundamental Theorem of Calculus. It is designed primarily for Science, Technology, Engineering, and Math majors. Prerequisites: Math 1 AND Math D, or Math 2.

Course Objectives:
- Apply integration to find area and compute the net change in a quantity.
- Determine if a function is continuous at a real number and on an interval.
- Interpret and compute the limit of a function at a real number numerically, graphically, and algebraically.
- Find the equation of a tangent line and of a secant line to a function and interpret the slopes of each of those lines.
- Find the derivative of a function as a limit.
- Evaluate integrals using the Fundamental Theorem of Calculus and using substitution methods.
- Evaluate a definite integral as a limit.
- Demonstrate ability to implicitly differentiate equations and use that technique to establish differentiation formulas for exponential, logarithmic and inverse trigonometric functions.
- Compute antiderivatives and utilize them in applications.
- Compute derivatives using differentiation formulas.
• Graph functions using methods of calculus - include information on domain, intercepts, symmetry, asymptotes, intervals of increasing and decreasing, extrema, concavity, and points of inflection.

• Use differentiation to solve applications such as related rate problems and optimization problems.

Student Learning Outcomes:

• Define, interpret and evaluate the limit of a function.
• Define, evaluate, and solve application problems using the derivative.
• Define and evaluate definite and indefinite integrals using the Fundamental Theorem of Calculus and/or properties of integrals.

West Valley College Policies

It's important for you to be aware of policies in the West Valley College Catalog. Below are a few key policies from the Rights and Responsibilities section you should know about.

• Attendance: Know that instructors may drop any student who does not attend the first class, who has missed any one class during the first three weeks of instruction, or who has missed more than 10% of the total class hours for the semester.
• Registration and Drops: Understand that it is your responsibility to make sure you are registered and/or dropped from any class by the deadlines listed in the schedule of classes.
• Withdrawal from a class: Make sure you know the last day to drop with a W (put that date in your calendar!). Even if you ask an instructor to drop you, it is still your responsibility, so double-check your enrollment status in the Portal. It’s important to know that instructors are required to issue a grade for any student still enrolled after the last day to drop.
• Academic Dishonesty: Understand what this means—it includes in-class cheating, out-of-class cheating, plagiarism, helping another student in cheating or plagiarism, or knowingly giving false information to college staff, faculty, administrators or other officials. You can receive a failing grade for the assignment if there is reasonable proof or documentation of academic dishonesty. Please seek help with your coursework from your instructor or a tutor instead of cheating.

Important Dates

• Last day to ADD this class: February 14
• Last day to DROP this class without a “W” and with a refund: February 14
• Last day to DROP this class with a “W:” April 30
• FINAL EXAM for this class: Wednesday, May 26, in our Zoom classroom, 9:40 am–11:40 am

West Valley College Nondiscrimination Statement

The District, and each individual who represents the District, shall provide access to its services, classes and programs without regard to national origin, religion, age, sex or gender, race, color, medical condition, ancestry, sexual orientation, marital status, physical or mental disability, or because he/she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.