Single Variable Calculus 2

Math 251 Section 01 | 4 units | North 102 | Crafton Hills College | Fall 2019



MyMathLab and Canvas

Your Canvas course will link to MyMathLab, which is required for the course. MyMathLab will supply your online homework, quizzes, and textbook. The cost is about \$130.

Textbook

Calculus Early Transcendentals 3rd Ed - Briggs, Cochran, and Gillett. Remember that purchasing access to MyMathLab will give you access to the book and all of the resources (including handy videos). You do not need to purchase the physical book.

Required Materials

- 1. For PC, Windows 7 or higher
- 2. For Mac, OS 10.4 or higher
- 3. Speakers
- 4. Plug-ins you may need to install could include: a. <u>Adobe Reader</u>
 - b. Flash Player

Prerequisite

MATH 250 or Eligibility for MATH 251 as determined through the Crafton Hills College assessment process..

Student Learning Outcomes

- 1. The student will evaluate and analyze integrals as appropriate to first-year calculus.
- The student will evaluate and analyze sequences and series and their relation to functions as appropriate to first-year calculus.
- 3. The student will recognize, define, and use formal mathematical notation as appropriate to the course outline.

Note: Any information in this syllabus is tentative and may change at the discretion of the instructor at any time.

5. MyMathLab

Meet Your Instructor

Who I am

My name is Brandi Bailes. In the classroom, I go by Professor (Bailes), Instructor (Bailes), or Prof B. I prefer the pronouns she and her or zie and zir. My last name is pronounced "Bayless."

Where I am

My office is CTB-323. I reserve the following hours for students: Tuesday and Thursday from 8-9AM and Monday and Wednesday from 12 – 1 PM. I am around more often than that. Those are just the hours specially reserved for students. If you would like to see if I am available before you drop by, you can call my office at 909-389-3335 or extension 3335 from an oncampus phone.



Online presence

My website allows multiple ways to find my slides and other materials. Here is a link to <u>My</u> <u>Google Site</u> (https://sites.google. com/site/profbrandibailes)

You are also welcome to follow me on Twitter at @math_prof_b or on YouTube at Professor Bailes.

Contacting me

You are welcome to send me an email at any time. My email address is bbailes@craftonhills.edu. You can also contact me through the Canvas inbox or through the Chat in our class if I am signed on. Expect a 24-hour (within the work-week) turn around on emails

Calculus 2 has been the most challenging subject I've taken so far. I don't think I've ever taken such a hard exam, but what I've learned is how to really apply myself to study and become a good student. -Former Calc 2 Student

Embrace the Group Work

A note from a former Calc 2 Student, "Truly, you can't ever teach every student perfectly, and I know you know this because you have decided to use the methods that help the student in areas that improve their ability to operate not only in the arena of mathematics, but in the larger arena of life; sociability is key on a planet filled with social beings, regardless of how anti-social we may pretend to be -- we cannot help our need for each other and the integrity of community. More to the point: your teaching methods may feel forceful to some students who desire to remain lone-wolves, or anti-social, and may surely feel resistant; however, I am witness to the experience that, eventually, fellow students are seen on more equal around, that we students can relate to each other through our struggles in the classroom, and the inevitable mention of struggles outside the classroom as bonds develop, and because of this I encourage you not to waiver from your teaching methods too much.



Surely, there is always room for improvement, but the basic idea that students connecting with each other, breaking out of their personal-space bubbles, and working together as well as displaying their work openly for correction and praise, needs to remain. I have benefited tremendously because of it, [...], because it has given me what I can only describe with the word, 'grit.' It's that difficult quality of a person that allows them to persevere, to push further, with necessary sacrifice, and achieve more than previously believed possible.''

Important Dates

No Class

Campus Open Sept 27 (Flex Day) Campus Closed Sep 2 (Labor Day), Nov 11 (Veterans Day), Nov 28 – 30 (Thanksgiving)

Drop/Withdraw

Drop without a W: 9/8 Drop with a W: 11/1

"Success isn't always about greatness. It's about consistency. Consistent, hard work leads to success. Greatness will come."



What should I expect in this class?

Student-Centered Instruction

Could you learn how to ride a bike by watching the Summer X Games? Maybe, but it would be exceedingly difficult. You would probably fall many times. And since you didn't see the expert fall very often, you may not know that it is part of learning; you may decide that bike riding isn't for you. You may think: Clearly, some people are bike riders and some are not.

Luckily, most of us learn to ride a bike by having someone who knows how to ride a bike guide us, run alongside us, and then let us go. Many of us will fall. But now we have a guide to let us know it is part of the process of learning. With the encouragement of our guide and our own grit, we keep trying until we successfully pedal ourselves down the road. Then we're off and nothing can stop us!

Student-centered instruction follows this second, more successful, model. The focus of activity shifts from the teacher to the learner. This learning model employs a teacher-guided-discovery process that allows us to identify gaps in student understanding and help students fill those gaps. Our interactions are spent on discussion, collaborative work, and engagement with learning activities. This allows students to spend their time in the process of learning rather than the process of observing.

Math 251 Course Description

Methods of integration, applications of the integrals, improper integrals, conic sections, parametric equations, infinite series, and polar coordinates. Integration of algebraic, trigonometric, exponential, logarithmic, and inverse trigonometric functions; area between curves, volume of revolution, length of a plane curve, area of a surface of revolution, rectilinear motion, work done by a variable force (including Hooke's Law), fluid pressure; improper integrals, conic sections, parametric equations, infinite series, and polar coordinates. Associate Degree applicable, and transferable to both the CSU and the UC systems

Workload

Be ready to spend approximately 16 - 20 hours each week in our class. I encourage you to continue working with your peers in the <u>Crafton Hills</u> <u>College tutoring center</u> outside of class.

The long and short of it is that online learning is often more challenging. It is okay to think it is difficult because it is difficult. What matters is how we approach the challenge.

Requirements for passing

Students must earn at least a 60% on the final exam and at least a 70% overall score in order to pass the class. Students earning less than a 60% on the final exam can earn, at maximum, a D in the class regardless of their overall grade

Student Support

Technical

If for some reason you cannot log in to our course, contact the SBCCD Technical Assistance Center 24/7 at 1-877-241-1756. Please also send me an email so that I am aware of the issue.

If you run into difficulty accessing MyMathLab, please contact Pearson Support at 1-866-952-8628 or the <u>Pearson Support Website</u>.

Accessibility

It is my goal to make sure that everyone can succeed in this course regardless of their abilities, so please make a note of the Disabled Students Services (DSS) on our campus. The DSS has friendly, helpful staff. I highly recommend becoming familiar with the services they offer.

Question and Answer

The Ask a Classmate (Peer) discussion board is a forum for you to talk to other students in this class. Here you can ask questions, provide answers, share resources, and interesting course-related facts or stories with your peers. Just like you would before or after class. Please post general course-related questions to the Ask the Instructor discussion board so that all can share in the information.

Tutoring

Additional in-person tutoring can be scheduled through the Crafton Hills Tutoring Center and STEM Center. They also accept walk-ins. Be sure to have your student ID# handy to sign in.

Mental Health

Stress can wreak havoc on us. Don't be afraid or ashamed to reach out if you are feeling overwhelmed. The best time to take care of yourself is now. Please reach out to <u>ULifeline</u> for help on or off campus when you need it.

Practices for Success

Regular Attendance

In this course attending means that you are participating with your classmates, completing activities and assignments, and asking questions so you can get help before the week is over.

Our college policy states that a student may be dropped from the course for excessive absences or tardiness. I understand that gets complicated. So if you know you are going to be missing from assignments or discussions, please email me to let me know ahead of time. If I don't hear from you and you are missing for more than one week, you may be dropped from the class. If you quit attending class, you should not assume that I will drop you. Should you choose to drop, ultimately it is your responsibility to officially withdraw.

Good Netiquette

It is important to recognize that the online classroom is, in fact, a classroom, and certain behaviors are expected when you communicate with both your peers and your instructors. These guidelines for online behavior and interaction are known as netiquette.

We will use discussion boards in our class. Please review this article from the BBC on the the <u>rules of</u> <u>netiquette</u>. There is also lots of information about netiquette in the introduction module of our class. If your behavior on discussion boards becomes disrespectful, I may remove you from the discussion or the course depending on the seriousness of the infractions. If you are removed from the discussion, you will you will receive a grade of 0 for that discussion.

Please also keep in mind that posting to a discussion right before it is due is harmful to the learning environment and disrespectful to your peers.

Student Code of Conduct

Students are bound by the Student Code of Conduct. In this course, cheating, plagiarism, copying, fraud and/or lying may result in a grade of "F" for the assignment/test with no make-up work permitted. Any of these infractions may also result in formal disciplinary action by the Associate Dean of Student Affairs as described in the Student Code of Conduct.



Peer Support

Practice positive, helpful peer support. This is a vital student, work, and life skill. There is no career where you are not required to work well with others at some point. Every job is essentially a long, elaborate group project. Now is a great time to learn - or continue to practice - how to make working with others fun and productive.

Course Grade

Grading Scale

The grading scale will be as follows: A = 90% and above, B = 80-89%, C = 70-79%, D = 60-69%, F = below 60%.

A note on grades

Instructors do not "give" grades. Students earn them. The percentage you earn reflects the grade you earn. If you are on the border of a higher grade, talk to me before the final to see what you can do to move to the next letter.

Late Work Policy

In general, I do not accept late work. I drop lowest scores from every grading category, except exams, so that if you unexpectedly miss an assignment or two due to an emergency, your grade will not be harmed. If you know that you have an upcoming schedule conflict, please talk to me to see if it is possible to turn in an assignment or discussion early or take and exam or quiz ahead of time.

Show Your Work

Calculators are permitted on all assignments. However, for most assignments (omitting homework completed in MyMathLab) you must show work for credit.

Assessments

Homework Assignments – 15%:

Homework is due weekly. I will drop your four lowest homework scores. There will be conceptual homework based on video assignments/reading and as well as traditional math workout homework.

Unit Checkpoints - 5%:

Modules are organized into units on Canvas. After every three or four modules, you will have a Unit Checkpoint on Canvas. Think of these checkpoints as take-home quizzes that you complete online. Also, the unit checkpoints are great practice for each in-class exam and the final exam. I will drop your lowest score from this category.

Online Discussions – 15%:

Be sure to participate in all online discussions using proper netiquette. I will drop your two lowest discussion scores. Students should also expect 1 to 3 discussions per week. It is my goal to ensure that students are prepared for all exams, no surprises or trick questions. However, this is reliant on students actively engaging in homework assignments and discussions.

Exams – 40% (10% each):

Four exams will be given during the semester. You may be required to show your student ID to take the exam. Make-up exams are not allowed for unexcused absences. If you know you are going to be absent for an exam, please talk to the professor to schedule a time to take it. I will not drop any exam scores. There are typically 2 - 4 weeks between exams. Each exam is given a week. Part of the week should be spent on review and part on taking the exam.

Final Exam – 25%:

A comprehensive written final exam will be given which will include material covered throughout the entire semester. Everyone is required to take the final exam. Failure to take the final exam will result in an "F" grade in the course. All exams must be proctored. You must get at least a D (60%) raw score on the final exam to pass the class.

"The beautiful thing about learning is that no one can take it away from you."

-BB King