



### Welcome to Math 12!

This course covers topics in calculus with an emphasis on the meaning of and mechanics of calculus techniques used in business, economics, and social science applications. Many students who enroll in this class are business students and the examples we do keep that focus in mind.

Although some classic physics/ science applications that are central to the development of calculus are covered, there is far less emphasis on those topics than in a traditional calculus sequence. (For example, trigonometric functions are not included in this course.)

Some schools may require business students to take a full year of calculus rather than this course, so students should check with their intended transfer schools to be certain of their requirements.

### Student Learning Outcomes (SLO)

1. Use correct notation and mathematical precision in evaluation and interpretation of derivatives and integrals.
2. Evaluate, solve, interpret and communicate business and social science applications using appropriate differentiation and integration methodologies.

### Course outline - official list of required topics:

<http://ecms.deanza.edu/deptoutlinespublic.html>

### Instructor and Contact Information

**Instructor: Roberta Bloom**

**Phone:** 408-864-8591      **Office:** S33N

**email:** bloomroberta@deanza.edu

*email is preferred*

**Office Hours:** Room S33N

Mon-Thurs: 11:35 am – 12:15 pm

Mon. afternoon: 2:00 -2:40 pm

### Instructor's Websites:

<http://deanza.edu/faculty/bloomroberta/>

Also Course Studio in MyPortal

**Math 12 covers a variety of challenging and sophisticated mathematical skills and concepts.**

**Please review your schedule to plan time for the work needed to succeed.**

To satisfy transfer requirements to 4-year colleges, UC and CSU require us to cover a wide spectrum of calculus topics drawn from throughout the entire regular calculus sequence, emphasizing business applications.

Regular attendance and regular work outside class are required to become proficient. To master the material, expect to do at least 10 hours per week of study outside of class.

Students should have a solid background in algebra as a foundation for learning calculus.

**Math Prerequisite:** Math 11 Finite Mathematics or Math 41 Precalculus I: Theory of Functions  
with a grade of C or better; or equivalent placement

**English Advisory:** EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273

*Although this is a Math course, English reading comprehension and writing are very important in Math 12.*

**Materials & Resources required for this class – see page 2 for more details**

- [Http://deanza.edu/faculty/bloomroberta](http://deanza.edu/faculty/bloomroberta) and **Course Studio in MyPortal**
- **Textbook:** Calculus and its Applications 11th ed., by Bittinger, Ellenbogen, Surgent 2016 (Pearson)
- **MyMathLab** : online homework system
- **TI-83+ or TI-84+ calculator**
- Graph paper (1/4 or 1/5 inch squares), ruler, yellow highlighter

**Bring To Class Daily:** calculator & 4 spare AAA batteries, paper and graph paper, ruler, small stapler, highlighter

**Important Dates:** *Check online academic calendar to confirm & verify dates in case of change or error.*

No Class: Fri. 11/10, Th.&Fri. 11/23&24      Last day to Add: Sat. 10/7      Last day to Drop - no W: Sun. 10/8

Last day to Elect P/NP: Fri. 10/20      Last day to Withdraw (W): Fri. 11/17 *College enforces all deadlines.*

**Final Exam: Wed. 12/13: 11:30-1:30 pm** - *this is the college mandated official final exam date/time.*

## **MATERIALS & RESOURCES REQUIRED FOR THIS CLASS:**

**Open Website:** <http://deanza.edu/faculty/bloomroberta> ; no log-in needed;

**Course Studio** in MyPortal may have additional resources –can be accessed by currently enrolled students only

**Email:** To contact the instructor, use email bloomroberta@fhda.edu or bloomroberta@deanza.edu . (Both addresses direct email to the same place.) On occasion the instructor will send information, updates, or resources to the class by email. Please check your email frequently. The only address the instructor can use to send you email is the email address you have put into MyPortal. Please check the email address you have in MyPortal and correct it if needed.

**Textbook: Calculus and its Applications, Bittinger, Ellenbogen, Surgent 11th ed. 2016 (Pearson)**  
**MyMathLab access is needed for homework system: Code for this course is bloom29963**

- An email will be sent to students with a pdf attachment with instructions for logging into MyMathLab to access the course, and a copy will be posted either on the open website or in Course Studio in MyPortal.
- Students should investigate prices and formats to decide about what/how to purchase to best fit the individual student's needs regarding format and cost. The bookstore sells print books and access codes. However if you purchase access online directly, which includes the ebook, it is less expensive than purchasing the access code in the bookstore. For many students, the most economical way is probably to buy the access code online and use the ebook within MyMathLab.
- Students with financial aid vouchers may need to purchase their access codes in the bookstore since financial aid vouchers usually are not applicable to online purchase of access codes.

**Calculator Required: TI-83, TI-83+, or TI-84+:** Instructor demonstrates use of only the TI-83 & 84 families of calculators in class; any calculator in the TI-83 or TI-84 families of calculators are OK.

- The following calculators are NOT permitted on exams and quizzes in this class: TI-89, TI-Nspire , any brand or model calculator with a built in computer algebra system that does symbolic algebraic mathematics
- If your calculator is lost, stolen, broken, etc. it is your responsibility to obtain a calculator to use. Library Reserve has TI-83/84 calculators for limited loans. The instructor can NOT lend her calculator.
- Cell phones or other devices can NOT be used as a calculator on a quiz or exam. Students can **NOT** share calculators for quizzes or exams.

**EDUCATIONAL ACCESS:** Please see instructor during office hours to discuss your situation confidentially if you have accommodations; you should see the instructor during the first week of class or as soon as you receive approval from the appropriate support service.

For information about eligibility, support services or accommodations due to physical or learning disability see:

- Disability Support Service (DSS): [www.deanza.edu/dss](http://www.deanza.edu/dss) Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): [www.deanza.edu/edc](http://www.deanza.edu/edc) Location: LCW 110; (408) 864-8839
- Special Education Division; [www.deanza.edu/specialed](http://www.deanza.edu/specialed) (408) 864-8407

**BE PREPARED: Your preparation affects your and other students' ability to learn in class.**

Active learning and exploration of ideas are possible when students come to class capable and prepared. Such activities are designed to present material in a more accessible, intuitive manner with hands-on participation. If students are unprepared and therefore not able to participate, an activity may fail as a demonstration of the concept it is designed to illustrate, adversely affecting everybody's opportunity to learn. **Bring required materials daily and keep up to date to be able to participate in a constructive manner to class learning activities.**

**RESPECT OTHER STUDENTS' RIGHT TO LEARN in an environment that supports learning.**

- **Please save private conversations for before or after class so that all students can hear and pay attention during class.** No private conversations or disruptive behavior in class. Students disrupting class may be asked to leave the classroom or may be dropped from the class.
- **Turn off & put away cell phones & other devices before class:** if your device makes noise or disrupts class, it interferes with other students' ability to learn; the instructor may ask you to leave. If it makes noise during a quiz/exam, points may be deducted from your grade or the instructor may take your paper and ask you to leave.

## GRADES

| GRADES are based primarily on exams              |  |                 | Points  | Approx. % | Minimum percentage needed to <i>guarantee</i> the indicated grade |
|--|--|-----------------|---------|-----------|---|
| 4 Midterm Exams                                  |  |                 | 320     | 41% - 45% |   |
| Final Exam (mandatory)                           |  |                 | 160     | 20% -23%  |   |
| Quizzes <i>best 4 quizzes</i>                    |  |                 | 100     | 12% - 14% |   |
| MyMathLab Homework <i>best 10 assignments</i>    |  |                 | 100     | 12% - 14% |   |
| Other: Worksheets / Project / Graded Assignments |  |                 | 40 -100 | 6% - 13%  |   |
| Total points                                     |  | 720 -780 points |         | 100%      |   |

  

|              |                   |
|--------------|-------------------|
| A: 93%       | A-: 90%           |
| B+: 87%      | B: 83%    B-: 80% |
| C+: 76 %     | C: 68%            |
| D: 58%       |                   |
| F: under 58% |                   |

### **HOMEWORK: READ THE TEXTBOOK - REVIEW CLASS NOTES - DO ASSIGNED PROBLEMS IN MYMATHLAB**

- **Homework will be assigned in MyMathLab to provide practice in skills and concepts we learn in class.** Practice is essential in mastering the skills.
- **There will be one or two assignments in MyMathLab each week.** The assignments will be assigned and coordinated as the quarter progresses, to best fit our schedule of covering material and preparing for quizzes and exams.
- **The online homework is tailored to learning. Using an online homework system provides feedback and resources. Students get repeated attempts on homework questions to answer correctly** and have the opportunity on most questions to attempt a similar version if not answered correctly on the first version of the problem.
- **The best 10 assignments count in your course grade for a total of 100 points.**  
**How your MyMathLab portion of your grade is determined:** MyMathLab counts the number of correct answers in an assignment and reports the number and percent answered correctly. For inclusion in the grade calculation, each assignment is converted to a grade scale of 0 – 10 points, using the percentage of correct answers. Example: Suppose an assignment has 25 responses. The student correctly answers 20 out of 25, which is 80%. The assignment is worth 10 points, and the student earns 80% of 10 points, which is 8 points.
- **Quizzes are based closely on homework** to motivate students to do the homework and to assess understanding
- **Do homework with the goal of understanding** so that you will be able to do similar problems on quizzes and exams - it is not enough to just earn the points without mastering the material. Sometimes you need to struggle though a problem until the concept becomes clear – keep trying!
- Get help on homework if you need it: If you have trouble with a concept or skill, come to the instructor’s office hours or use the free tutoring available in the Tutorial Center in room S43 to get help. Try a similar problem and use repeated attempts that you are permitted. Use online resources such as videos and hints if they are available within MyMathLab.
- The instructor will answer homework questions in class to the extent that time permits.

### **QUIZZES: 5 quizzes – 25 points each – best 4 quizzes are counted – total 100 points:**

Based closely on homework, worksheets, and classwork. Prepare for quizzes by doing homework and worksheets and paying attention in class. Quizzes provide a way for students to assess understanding before an exam and for the instructor to assess students’ understanding and identify areas of difficulty. Quizzes provide feedback before and in between exams and help motivate students to pace work on a timely basis instead of cramming before exams.

- Grading depends on clarity of work, interpretations, accuracy and completeness of graphs, and explanations as well as numerical answers. Note that the student learning outcomes refer to correct use of notation, interpretation, communication, as well as mastering techniques for getting correct numerical answers.
- **IF YOU ARE ABSENT FOR A QUIZ: No Make-Up Quizzes – No exceptions!!**  
 If you are absent for a quiz for ANY reason, you earn a quiz grade of 0. *One quiz grade of 0 for absence can be dropped as your lowest grade. However, try to avoid quiz absences as dropping a quiz grade of 0 for absence will mean you can not drop some other low quiz grade.*

### **MIDTERM EXAMS: 4 exams; 4 @ 80 points each - Bring calculator to all exams**

- If it improves your course grade, your lowest exam grade is replaced by ½ of your final exam grade (not to exceed 80 points as a replacement grade). This is a replacement on a percentage equivalent basis, not to exceed 100%.
- **NO MAKE-UP EXAMS.** Absence earns a grade of 0. *One such grade of 0 for absence would be the lowest exam score that gets replaced by the percentage equivalent grade on the final exam. Students should try to avoid exam absences as an exam absence would prevent replacement of the grade on another midterm that had a poor grade.*

**FINAL EXAM: 2 hours; 160 points; mandatory ; comprehensive: includes ALL material covered during the quarter**

No early/late final exams. The college policy is that the final exam must be given at the official time indicated in the college schedule and on the first page of this syllabus. Plan your schedule now to be available for the final exam on that date and time.

**REPLACEMENT POLICY FOR GRADES:** If it improves your course grade, your lowest exam grade is replaced by the percentage equivalent grade on the final exam (1/2 of final exam grade), not to exceed 100%. This includes an exam grade of 0 for absence. If your total homework grade is lower than your lowest exam grade, the homework grade can be replaced according to this policy instead of a low midterm exam, if it is more advantageous to your grade.

**PROJECTS/LABS/WORKSHEETS/OTHER ASSIGNMENTS/CLASSWORK: 40-100 points of your grade.**

These items will be determined during the quarter. Some may be done entirely in class and can occur anytime in the quarter, often without advance notice. Some may be part in class and part at home; some at home only. These serve a variety of purposes, such as in depth investigation of a concept, making connections between concepts in different sections, or sometimes just providing additional practice. It also provides students with an opportunity to earn part of the grade from items other than exams and quizzes.

- Activities done as part of the day's classwork can not be made up if you are absent.
- If a worksheet or activity is assigned to be done at home, or started in class and completed at home, then it must be turned in on time, at the beginning of class on its due date.

**More about QUIZZES & EXAMS:**

- **Schedule Changes**, if any, will be announced in class (and posted on the website, if possible). Because students are expected to attend daily, if you are absent for an exam or quiz, the absence policies above apply even if the date of a quiz/ exam was changed.
- **ESL:** If English is a second language, a print (not electronic) English translation dictionary is allowed for exams/quizzes.

**STANDARDS OF WORK: College level work is expected ; work is graded for both accuracy and quality of work.**

- **Written work that is graded must be complete, neat, legible, organized, and in order.** If you are requested to show your work, then correct answers must be supported by correct work to receive credit; otherwise you may lose credit, even if the final answer is correct. If explanations or interpretations are requested, you can lose credit for missing, incomplete or incorrect interpretations and explanations.
- **For papers handed in :** Write full name/class time and staple (no folded corners); otherwise they may not be accepted or you may not receive credit; if pages of unstapled work come apart, it is considered incomplete.
- **Some labs and projects may require answers to be typed**, not handwritten. See next page for information about access to on campus computers if you need it to type up your work.

**ACADEMIC INTEGRITY: All students are expected to exercise academic integrity throughout the quarter.**

- **Cheating and academic dishonesty are not tolerated and can result in a grade of 0 or F for that quiz/exam/assignment or a grade of F for the course and referral to the Dean for academic discipline.** Any grade of 0 or F due to cheating or academic dishonesty will not be dropped or replaced.
- Cheating includes, but is not limited to: copying from other students, permitting other students to copy from you, plagiarism, submitting work that is not your own, using notes that do not meet permitted specifications, continuing to write/erase on exam/quiz after the permitted time has ended, changing your exam/quiz paper after it has been graded and then requesting a grading correction. Using any electronic device other than your approved calculator on a quiz or exam may be considered cheating. Sharing a calculator with another student for exam/quiz is considered cheating as work may be saved in memory.

**CLASS CANCELLATION, EMERGENCY:**

If class is canceled for any reason, or if an emergency causes campus to be closed, assume that any quiz, exam or due date scheduled on that date will be rescheduled to our next class meeting. If there are other changes, I will announce them in class after classes resume. Check the website and email; if necessary and if possible, I may post a message.

**ATTENDANCE, DROPS, WITHDRAWALS:** Regular attendance is important for success in math class as each day's work builds upon what came before. You are expected to attend all classes, arrive on time & stay for the entire class. Late arrival/early departures are disruptive to the class and to your classmate's learning. The instructor reserves the right to drop students who miss more than 5 classes during the quarter or who miss any classes in the first two weeks you. However the instructor may or may not perform such a drop/withdrawal.

**College Policy:** **If the student chooses not to complete the class, it is the STUDENT'S RESPONSIBILITY to drop or withdraw by the college deadlines.**

If you stop attending but do not withdraw or drop you may fail with a grade of F. *See deadlines on page 1 of syllabus and on college online academic calendar; the college strictly enforces these deadlines.*

- **Parking is difficult. Plan extra time** to avoid traffic and parking problems to avoid being late.
- **Get classmates' contact information so you can get notes and information.** Instructor will not repeat lectures during class, office hours, or any other time. If you are absent, read the textbook and go to the Tutorial Center first; come to office hours if you still have specific questions.
- **Check the website to find out about due dates or schedule changes.** You are responsible for keeping up and to be aware of any schedule changes even when absent.

**COMPUTER ACCESS:** This class requires several computer resources explained on pages 1 and 2.

- Library West Computer Lab has computers with internet access; located in the **LCW** building downstairs  
<http://www.deanza.edu/library/librarywestcomputer.html> (408-864-8761)
- Math/Science Tutorial Center in Room S43 also has some computers available for student use.

### **IF YOU NEED HELP IN MATH 12**

- **MATH TUTORIAL CENTER (S-43) has FREE DROP-IN TUTORING for MATH 12.**
- **FREE ONLINE TUTORING from SMARTTHINKING.COM** - available in MyPortal  
Amount of online tutoring may be limited per student during the quarter.
- **SEE INSTRUCTOR DURING OFFICE HOURS** to ask questions about material you need help with.
- **FIND A STUDY PARTNER OR FORM A STUDY GROUP.** Working with somebody helps you understand material better. Work consistently through the quarter. Collaboration is easy: use phone, email, text, or chat if you can't study together in person. Find a study partner who is interested in **WORKING WITH** you, not somebody trying to earn their points based on your effort without their own similar effort.
- **DON'T WAIT UNTIL YOU ARE DROWNING TO GET HELP.** Get help as soon as you have difficulty, while there is still time to catch up and improve! Classes taken on the quarter system move quickly; if you wait until you are behind, it will be difficult to catch up. You probably need this class to transfer. Not doing work and/or not getting help early may endanger your transfer plans. Your transfer plans may be delayed if you don't pass Math 12.
- **PREPARE FOR EXAMS EARLY:** Students who start studying several days early are more likely to succeed in this course. It takes a couple of nights of sleep for material you study to become set in your long-term memory. If you cram the day before, you may "blank out" when trying to answer exam questions, or may not recall it quickly enough to finish in time.