

<b>Math 12.23 CRN 30754 Intro. Calculus for Business &amp; Social Science De Anza College Winter 2016</b>			
<b>12:30 pm – 1:20 pm</b>	<b>Instructor: Roberta Bloom</b>	<b>Office S41A</b>	<b>Phone: 408-864-8591</b>
<b>5 days: MTWThF</b>	<b>email: bloomroberta@deanza.edu <i>email is preferred</i></b>		
<b>Office Hours: Mon 2:40-3:30 in Tutorial Center S43 &amp; 3:40-4:30 Office S41A ; Tues &amp; Wed. 2:40-3:30 Office S41A</b>			
<b>Instructor's Websites: <a href="https://catalyst.deanza.edu">https://catalyst.deanza.edu</a> AND <a href="http://deanza.edu/faculty/bloomroberta/">http://deanza.edu/faculty/bloomroberta/</a></b>			

**Math Prerequisite:** Math 11 Finite Mathematics or Math 41 Precalculus I with grade of C or better

**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 11.*

### Welcome to Math 12 Introductory Calculus for Business and Social Science

- This course covers topics in calculus with a focus on the meaning of and mechanics of calculus techniques used in business applications. The course is designed primarily for non-math business majors; however, students should have a solid background in algebra. Although some physics/ science applications are covered, there is less emphasis on those topics than in a traditional calculus sequence. While we examine the meaning behind the concepts and techniques, there is also less emphasis on the mathematical theory and derivations than in the traditional calculus sequence.
- Math 12 requires daily attendance and 10 hours per week of study each week outside of class.
- Some business schools may require 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.

**Course Description:** Introduction to limits, differentiation, and integration of single variable functions. Differentiation of multivariable functions. Applications in business, economics, and social science.

#### Student Learning Outcomes:

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 - required topics:** <http://ecms.deanza.edu/deptoutlinespublic.html>

- Required:**
- **Catalyst:** free online course management system: <https://catalyst.deanza.edu>
  - **Textbook:** Applied Calculus, 5th edition by Hughes Hallet, Gleason, Lock and Flath, et al 2014, published by Wiley ISBN 978-1-118-17492-0
  - **TI-83+ or TI-84+ calculator** (more info on page 4)
  - **Graph paper (1/4 or 1/5 inch squares), ruler**

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

**College Schedule & Deadlines** are enforced by the college: Last day to Add: Sat. 1/16

Last day to Drop (no W): Mon. 1/18 Last day to drop with refund: Sun 1/17 Last day to Elect P/NP: Fri. 1/29

Last day to Withdraw with W: Fri. 2/26 in week 8 *Check online academic calendar to confirm these dates are correct.*

**Final Exam:** This is the college mandated official final exam date/time. **Wed. 3/23: 11:30 a.m.-1:30 p.m.**

#### GRADING SUMMARY: For details on grading items, see following pages of syllabus

GRADES are based primarily on exams	Points	Approx. %	Minimum percentage needed to guarantee the indicated grade		
4 Midterm Exams	320	47% - 51%	A: 93%	A-: 90%	
Final Exam (mandatory)	160	23% -26%	B+: 87%	B: 83%	B-: 80%
Quizzes <i>best 4 of 5 quizzes</i>	100	14% - 16%	C+: 76 %	C: 68%	
Other: Worksheets / Project / Graded Assignments	50 -100	8% - 15%	D: 58%	F: under 58%	
Total points	630 -680 points		100%		

**Read this entire complete syllabus to be familiar with the class and policies.** If the syllabus does not answer your question, ask the instructor. Syllabus is posted on online at:

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

<https://catalyst.deanza.edu>

[www.deanza.edu/psme](http://www.deanza.edu/psme)

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

**Assignments will be posted in Catalyst as we are ready for them; Catalyst will be updated frequently to be current.**

Homework provides practice in the skills and concepts we learn in class. Just as practice is important in sports and music, practice is also essential in learning math.

- More than ever in your past mathematics experience, reading your textbook is essential. The exercise sets approach problems graphically and numerically, as well as using the traditional symbolic algebraic approach. There is such variety in the exercise sets, that lecture examples often can't illustrate every type of question in the homework. This makes the reading a crucial part of the student's day-to-day preparation. The De Anza College catalog advises students to do at least 2 hours of work outside the classroom for each hour spent in class
- You are expected to do all homework for practice even though homework will not generally be collected and graded.
- Quizzes will be based closely on homework to motivate students to do the homework and to assess understanding
- Do the homework with the goal of understanding so that you will be able to do similar problems on quizzes and exams. Sometimes you need to struggle though a problem until the concept becomes clear – keep trying! You may find some problems challenging because they are about concepts rather than calculations. It may be very helpful to work on these assignments in small groups. It is your responsibility as a college student to check that your answers and solutions are correct, and to correct any mistakes or misunderstandings.
- If you have trouble with a concept or skill, come to the instructor's office hours or use free tutoring in the Tutorial Center Room S43. 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 and classwork. Prepare for quizzes by doing homework and paying attention in class.

- Quizzes provide a way for students to assess understanding before an exam and provide a way for the instructor to assess students' understanding and identify areas of difficulty. Quizzes 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.
- **NO MAKE-UP QUIZZES.** 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. You are limited to 1 quiz grade drop, so dropping a grade of 0 for quiz absence will mean you can NOT drop some other low quiz grade.*

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

- If it improves your course grade, your lowest exam grade is replaced by  $\frac{1}{2}$  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; an exam absence would therefore prevent replacement of the grade on another midterm that had a poor grade.*

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## **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: **See page 1 of syllabus for the final exam date and time.**

Plan your schedule now to be available for the final exam on that date and time.

## **WORKSHEETS/OTHER ASSIGNMENTS/CLASSWORK: 50-100 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.

- Activities done as part of the day's classwork can not be made up if you are absent.
- If an activity is to be done at home, then it must be turned in on time, at the beginning of class on its due date.
- For an activity started in class but completed at home, if you are absent on the day it is started then you may not be able to join a group that has already started it but may be required to do it on your own.

### **More about QUIZZES & EXAMS:**

- **Schedule Changes**, if any, will be announced in class (and posted on Catalyst, 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.

### **BE PREPARED: Bring required materials daily and keep up to date to be able to participate in a constructive manner to hands-on class learning activities.**

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. If students are unprepared, an activity may fail as a demonstration of the concept it is designed to illustrate, adversely affecting everybody's opportunity to learn.

### **RESPECT OTHER STUDENTS' RIGHT TO LEARN IN AN ENVIRONMENT THAT SUPPORTS LEARNING**

- **No private conversations or disruptive behavior in class.** You may talk to your classmates during designated collaborative work times; students talking during lecture times make it difficult for other students to follow and understand. 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 it makes noise or disrupts class, the instructor may ask you to leave. Each time it makes noise during a quiz/exam, points may be deducted from your grade. If it makes noise repeatedly during a quiz/ exam, the instructor may take your paper and ask you to leave.

### **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.

**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

**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.
- You are responsible for keeping up and to be aware of schedule changes even when absent. Get classmates' contact information so you can get notes and information. Check Catalyst to find out about due dates or schedule changes.
- 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.

**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.

**CALCULATOR REQUIRED: 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.

**If you want to use a different model of calculator, the following requirements apply:**

- your calculator needs to be able to do "tables" as well as graphs. Calculators that do symbolic algebraic manipulation are NOT permitted on exams and quizzes in this class; see the Catalyst website for a list of such calculators.
- Because the instructor does not have other models of calculators, if you use a calculator other than the TI-83 or 84, you need to be independent about learning to use it on your own to do the required calculations
- The instructor may (possible but not sure) provide calculator programs to assist in some types of calculations. If it turns out that we do use any calculator programs and if you use any calculator other than a TI-83 or 84 type of calculator, the instructor will not be able to provide you with a copy of the program and you will have to do longer, slower, more tedious calculations to complete the work

**If your calculator is lost, stolen, broken, etc. it is your responsibility to obtain a calculator to use.**

- Library Reserve (in LCW building) has TI-83/84 calculators for limited loans.
- 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. The instructor can **NOT** lend her calculator.

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

**Catalyst Website:** <https://catalyst.deanza.edu> Follow onscreen QUICK LOG IN instructions.

Only students registered in this class can get into the class Catalyst site.

If adding, ADD IMMEDIATELY to get Catalyst access within 24 to 48 hours.

Need help logging into Catalyst? Use tech help links on Catalyst site for help from their support staff.

**Open Website:** <http://deanza.edu/faculty/bloomroberta> ; no log-in needed; **students should use Catalyst for complete resources and up to date information.**

**IF YOU NEED HELP IN THIS MATH 12 CLASS**

- **MATH TUTORIAL CENTER (S-43) has FREE DROP-IN TUTORING**  
The tutors at the Calculus table can help you with 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 11.
- **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.