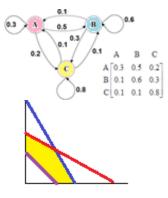# Math 11.01   Finite Mathematics   De Anza College
FALL 2016   9:30 am – 10:20 am   5 days: MTWThF   Instructor: Roberta Bloom

Welcome to Math 11 Finite Mathematics!

Finite Math covers a variety of topics united by their focus on mathematical techniques used in business applications. The growing field of "business analytics" uses mathematical models to enable businesses to make informed and best decisions in planning and running their operations. The topics we learn give insight to some methods used in industry, although we will explore them on a smaller scale. Topics include linear models and optimization, probability and related models, exponential models and financial calculations.

Math 11 is also a prerequisite for Math 12 Applied (Business) Calculus and to that end, we work to be proficient with linear, exponential, and logarithmic functions as well as to be conversant with mathematical models in business.

Student Learning Outcomes:

1. Identify, evaluate, and utilize appropriate linear and probability optimization models and communicate results.
2. Compare, evaluate, judge, make informed decisions, and communicate results about various financial opportunities by applying the mathematical concepts and principles of the time value of money.

To transfer to 4-year colleges, UC and CSU require Math 11 to cover a wide spectrum of topics at the introductory level. Because of the variety of topics covered, regular attendance is important; to master the material, expect to do 10 hours per week of study outside of class. Please review your schedule to plan time for the work needed to succeed.

Instructor and Contact Information
Instructor: Roberta Bloom
Phone: 408-864-8591   **Office:** S33N
email: bloomroberta@deanza.edu
         email is preferred
Office Hours:
   Mon, Tues, Wed, Thurs, Fri : 10:30-11:15
   Room G1
Instructor's Websites:
https://catalyst.deanza.edu
http://deanza.edu/faculty/bloomroberta/

Course outline - official list of required topics: http://ecms.deanza.edu/deptoutlinespublic.html

Math Prerequisite: Math 114 Intermediate Algebra with 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 10.

Materials & Resources required for this class:

- **Catalyst** : **FREE online course management system**: https:/catalyst.deanza.edu
- **Textbook: Applied Finite Mathematics new 3nd ed. 2016, by R. Sekhon/R. Bloom**
  FREE pdf file online: Link to pdf file online is at my faculty website
  http://www.deanza.edu/faculty/bloomroberta/math11.html
  If you prefer to use a print version of the textbook, it is available in print at the bookstore for under $35 as a printed pdf file 3 hole punched for a binder.
- **TI-83+ or TI-84+ calculator** (more info on page 4)
- Graph paper (1/4 or 1/5 inch squares), ruler, yellow highlighter
Bring To Class Daily: calculator & 4 spare AAA batteries, paper & graph paper, ruler, small stapler, highlighter

Important Dates: *Check online academic calendar to confirm dates all deadlines are enforced by the college*
Last day to Add: Sat. 10/8   Last day to Drop (no W): Sun. 10/9   Last day to Elect P/NP: Fri. 10/14
 Last day to Withdraw (W): Fri. 11/18 (week 8)
Final Exam: Tuesday 12/13: 9:15 am – 11:15 am. This is the college mandated official final exam date/time.

Materials & Resources required for this class:

Catalyst Website: https://catalyst.deanza.edu   De Anza's online course management system
Access to course materials, syllabus, schedule, announcements, assignments,
- Follow onscreen QUICK LOG IN instructions. After your first log-in, change your password.
- Only students registered in this class can login. If adding, ADD IMMEDIATELY to get Catalyst access in 24 to 48 hours.
- Need help logging into Catalyst? Use tech help links on Catalyst site for assistance directly from their support staff.

Open Website: http://deanza.edu/faculty/bloomroberta ; **no log-in needed; c**ontains some (not all) course materials that are also in Catalyst; students should use Catalyst for complete resources and up to date information**.**

Textbook: Applied Finite Mathematics new 3nd ed. 2016, by R. Sekhon/R. Bloom
- free pdf file – go to http://www.deanza.edu/faculty/bloomroberta/math11.html and follow link to textbook from instructors website.
- print book available as printed pdf file can be purchased at the bookstore – cost under $35

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 instructor may provide calculator programs to assist in some types of calculations; 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 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 Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): www.deanza.edu/edc Location: LCW 110; (408) 864-8839
- Special Education Division:; 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 guarantee the indicated grade		
4 Midterm Exams	320	47% - 51%			
Final Exam (mandatory)	160	23% -26%	A: 93%	A−: 90%	
Quizzes best 4 of 5 quizzes	100	14% - 16%	B+: 87%	B: 83%	B−: 80%
Other: Worksheets / Project / Graded Assignments	50 -100	8% - 15%	C+: 76 %	C: 68%	
Total points	630 -680 points	100%	D: 58%	F: under 58%	

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.

- 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 based on the homework.
- 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!
- 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.
- 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.
- **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. 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.*

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

- 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 <u>percentage equivalent</u> basis, not to exceed 100%.
- <u>NO MAKE-UP EXAMS</u>. 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 (not to exceed 100%) on the final exam; an exam absence would therefore 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.

PROJECTS/LABS/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 done 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 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.

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.

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 Catalyst 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.

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.

IF YOU NEED HELP IN MATH 11

- **MATH TUTORIAL CENTER (S-43) has FREE DROP-IN TUTORING for MATH 11.**
  Go to the Math 10 & 11 table to see if there are tutors for Math 11.
  Ask the staff at the desk when there are Math 11 tutors available; you can ask the names of the Math 11 tutors so you know which tutors you are looking for.
  Also: Precalculus tutors can help with chapters 1, 2, and 5;
        Statistics tutors can help with chapters 8 and 9.

- **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.

	Tentative Material Covered – we expect to be close to but will likely vary slightly from this schedule	Important Events or Dates
Week 1 9/26-9/20	Chapter 1: Linear Models	
Week 2 10/3-10/7	Chapter 2: Matrices	**QUIZ** Fri. Oct. 7
Week 3 10/10-9/20	Chapter 3: Linear Programs (geometric)	**EXAM Ch 1 & 2** Fri. Oct. 14
Week 4 10/17-10/7	Chapter 4: Linear Programs (simplex)	**QUIZ** Fri. Oct. 21
Week 5 10/24-10/7	Chapter 5: Exponential & Log Functions	**EXAM Ch. 3 & 4** Date To Be Determined
Week 6 10/31-11/4	Chapter 6: Financial Calculations	**QUIZ** Date To Be Determined
Week 7 11/7-11/11	Chapter 6: Financial Calculations	**QUIZ** Date To Be Determined No School Fri 11/11 Veterans: Day Holiday
Week 8 11/14-11/18	Chapter 7: Sets and Counting	**EXAM Ch 5 & 6** Date To Be Determined
Week 9 11/21-11/25	Chapter 8: Probability	No School Thurs & Fri 11/23& 25 Thanksgiving
Week 10 11/28-10/2	Chapters 8 & 9: Probability	**QUIZ** Date To Be Determined
Week 11-12/5- 12/9	Chapter 10: Markov Chains	**EXAM Ch 7, 8, 9, (10?)** Date To Be Determined
Week 12	**FINAL EXAM** **Tues 12/13 9:15-11:15 am**	