Instructor: Mai Orloff

Email: morloff@csusm.edu

Catalogue course description: Equations and inequalities, functions, graphs, polynomials, exponential and logarithmic functions, conics, sequences and series, counting principles, binomial theorem, and systems of linear equations.

Important Note: Although not listed in the enrollment system, this is a hybrid class. Except the first meeting on Monday 1/23/17 and a few additional Mondays when you take exams, there will be no class on Mondays. However, students are required to watch online lecture videos at home to take notes and are required to attend class on Wednesdays.

Meeting Times: MW, 2:30 pm – 3:45 pm in KEL 1104. You must attend every day in the first two weeks of class in order to avoid being dropped from the class. (See "administrative withdrawal" in the CSUSM General Catalog.) If I am late to class, you are responsible for staying until I arrive or official word arrives that class is cancelled. There is no rule stating that you may leave after a few minutes if the instructor doesn't show up.

Prerequisites: Completion of the Entry-Level Mathematics (ELM) requirement. I reserve the right to 'administratively drop' students who have not satisfied the prerequisites.

Texts: College Algebra, by Larson, Hostetler, 9th edition; Houghton-Mifflin, 2013. The student solutions manual is optional and recommended. For this course, you need to obtain online access to www.webassign.net to do homework; an e-book is available there, so it is not necessary to purchase a hard copy of the text.

Homework: There will be many homework problems. These will be the basis of your exams. Most of the homework you will submit online through webassign.net; you will have to keep up with that on a daily basis. There are two kinds of homework – online homework and paper homework. Two lowest scores of homework online or paper will be dropped.

Online Homework:
- Online homework assignments will be assigned and completed via WebAssign. See page 3 of the syllabus for registration instruction.

- Homework problems that are submitted 24 hours in advance of the due date/time will get an extra credit (5%) bonus. This bonus applies to each problem done in advance, so even if you cannot finish the entire homework set early, you can still pick up partial extra credit. If you are unable to complete the entire assignment by the deadline, you can still find it in WebAssign under “Past Assignments” and you can get an extension by clicking the “Extension Request” link. Extension requests will be automatically approved up for four days at a time. The extension window closes seven days after the original deadline. Make sure you send your request early so that you may have more time to work on the assignment. There will be a per-problem penalty for all problems completed after the original deadline. This penalty will be 10%.
Paper Homework or Writing Assignments: Writing Assignments will be announced in the class and posted on the WebAssign website no later than 5 pm on the day on which a class session is held, and they are due at the beginning of the next class.

Lecture Video Notes: You are required to watch online lecture videos at home and take notes while viewing the videos. Each textbook section includes a few lesson and example videos which may take a total from 2 minutes to 5 minutes for each video. You are required to open and watch all videos (lesson and examples). You are required to write a minimum 1 page of notes for each section. The notes will include your name, textbook section number and title, and the information from the videos. Each section need to be started on a new page. Video notes will be collected to be graded every Wednesdays. The set of notes to turn in (from 1 to 3 sections each week) needs to be stapled together. If you must miss a day in the class, you may drop your notes folder in the Math Department office or you may scan and email me your notes before the class. You will get zero on the notes (even if you have legitimate excuse) if I don’t receive your notes on time. There will be no make-up/late video notes.

Quizzes: There will be a quiz every Wednesday with a few exceptions. Problems for quizzes will be taken directly from the assigned videos and homework questions. Therefore, videos and homework should be completed by the beginning of the next class. Bring loose paper to class for the quizzes. Two of your lowest quiz scores will be dropped. All quizzes will be given at the very beginning of class. You are allowed to use homework and video notes but not computers or smart phones. There will be no make-up quizzes.

Exams: We'll have two midterm exams about 1/3 and 2/3 of the way through the semester (see tentative schedule below) Makeup exams will only be given for legitimate reasons; you should make every effort to take exams on time. If an event arises whereby you are unable to make it, you should contact me as soon as possible. (e.g., if you are sick, please have somebody you live with leave a message with me.) I reserve the right to resolve a missed exam by other means. You must have an ID card (e.g., CSUSM ID, driver’s license, or military ID) to take this class; I will check them during exams. I do not generally allow use of calculators on exams. Final exam is comprehensive and heavily weighted (at least 2/3 of the points) toward chapters 5, 6 and 8, and section 1.8. All exams are closed book and closed notes and taken in the classroom. All work must be shown on the exams.

Contact Info: Office hours are in Kel 1109 (Math Lab); W 1:00 pm – 2:25 pm; or by appointment. Email: morloff@csusm.edu. Once you have established your WebAssign account, I would prefer that you send me any email or use the option “Ask Your Teacher” through the Communication part of WebAssign. This way, it will be easier for me to answer your question because I’ll already be in WebAssign and have access to your course info. I generally return emails within 36 hours. I will also be posting information such as the syllabus, quiz and exam solutions, etc, at www.WebAssign.com. I will not use cc.csusm.edu. I do not generally allow use of calculators on exams. Final exam is comprehensive and heavily weighted (at least 2/3 of the points) toward chapters 5, 6 and 8, and section 1.8. All exams are closed book and closed notes and taken in the classroom. All work must be shown on the exams.

Grading:

<table>
<thead>
<tr>
<th></th>
<th>Homework (drop 2 lowest scores)</th>
<th>Video notes (112 required videos, 0.5 pt. ea.)</th>
<th>Quizzes (12 quizzes, drop 2 lowest scores, 10 pts. ea.)</th>
<th>Midterm Exams(2 exams in class, 100 pts. each x 2)</th>
<th>Final Exam (in class, 100 pts. each x 2)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80 pts</td>
<td>56 pts</td>
<td>100 pts</td>
<td>400 pts</td>
<td>220 pts</td>
<td>856 pts</td>
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<td></td>
<td>9.3 %</td>
<td>6.6 %</td>
<td>11.7 %</td>
<td>44.7 %</td>
<td>25.7 %</td>
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Your final grade will be determined by the following table.

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<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>F</th>
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<tbody>
<tr>
<td>Cutoff</td>
<td>95%</td>
<td>90%</td>
<td>85%</td>
<td>80%</td>
<td>75%</td>
<td>70%</td>
<td>65%</td>
<td>51%</td>
<td>50%</td>
<td>49%</td>
<td>48%</td>
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At my discretion, I may give extra credit for doing problems on the board during class. **If you miss class any exam day, this grading scheme is voided.** Knowing basic definitions and ability to do basic calculations with them are essential to pass this course. Ability to do solve standard kinds of equations is essential for a grade of B. Expect to be able to do word problems for a grade of A.

**IMPORTANT:** In order to receive GE credit for this class, you only need a C-minus. You need a C if you wish to take Math 132 (C-minus is not enough) or if your major requires it (see your advisor for further information.)

**Extra help:** Come to my office hours, or visit the Math Lab in Kellogg 1109 which offers free help on a walk-in basis during business hours.

**Deadlines:** Last day to drop with no record: end of 2nd week of classes. The rules for dropping classes are complicated; see the CSUSM General Catalog 2016-18, p. 88-90, for more details concerning dropping courses.

**Cheating:** If you are caught cheating during the course I reserve the right to give you a zero on the relevant assignment or give you an F for the course. **During exams, you must cover your work so that other students cannot see it. If another student sees your work and succeeds in copying it, both you and that student are guilty of cheating.** CSUSM Academic Honesty Policy: [https://www.csusm.edu/policies/active/documents/Academic_Honesty_Policy.html](https://www.csusm.edu/policies/active/documents/Academic_Honesty_Policy.html)

**WebAssign Student Quick Start Guide:**

**ENROLL:**

1. Go to [https://www.webassign.net/login.html](https://www.webassign.net/login.html) and click **ENTER CLASS KEY**
2. Enter the class key your instructor gave you and click **SUBMIT**.
   - Class Key: csusm 5683 8863
3. If the correct class and section is listed, click **YES, THIS IS MY CLASS**.
   - Course: Math 115 - Spring 2017, section 07
   - Instructor: Mai Orloff
4. Either provide your existing WebAssign account information or create a new account.
   - Select **I already have a WebAssign account**, enter your account information, and click **CONTINUE**.
   - Or
   - Select **I need to create a WebAssign account**, enter the requested information, and click **Create My Account**.

**LOGIN:**

1. Go to [https://www.webassign.net/login.html](https://www.webassign.net/login.html) and click **LOG IN**.
2. Type your **Username**, **Institution** (csusm) and **Password**.
3. Click **LOG IN**.
4. If you are enrolled in more than one class, select a class from the **My Classes** menu.

**PURCHASE ACCESS:** WebAssign gives you free access for two weeks after the start of class. To continue using WebAssign after that, either enter an access code or purchase access online.
# Math 115 - Tentative Schedule

Click the link below to see all lecture videos

http://www.webassign.net/resources/larcolalg9/larcolalg9_lectures_1_1.html

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Coverage</th>
<th>Video Notes due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>1/23</td>
<td>Introduction, syllabus</td>
<td></td>
</tr>
</tbody>
</table>
| Wed | 1/25 | Section 1.1 Graphs of Equations  
Section 1.2 Linear Equations in one variable  
Quiz 1 | 1.1: Obj. 1.1.1-1.1.4 (5 videos)  
1.2: Obj. 1.2.1-1.2.5 (5 videos) |
| Wed | 2/1 | Section 1.3 Modeling with linear equations  
Section 1.4 Quadratic Equations with applications  
Quiz 2 | 1.3: Obj. 1.3.1, 1.3.3 (5 videos)  
Skip obj 1.3.2 min. cost A&B  
1.3.1C: Consecutive integers  
1.3.2 Investment/simple interest  
1.4: Obj. 1.4.1-1.4.5 (5 videos)  
(skip obj. 1.4.3) |
| Wed | 2/8 | Section 1.6 Other types of Equations  
Section 1.7 Linear inequalities in one variable  
Quiz 3 | 1.6: Obj. 1.6.1-1.6.3 (5 videos)  
1.7: Obj. 1.1.1-1.7.5 (4 videos)  
(skip obj. 1.7.4) |
| Wed | 2/15 | Section 1.8 Other types of inequalities  
Section 2.1 Linear Equations in Two Variables  
Quiz 4 | 1.8: Obj. 1.1.1-1.8.2 (3 videos)  
2.1: Obj. 2.1.1-2.1.5 (5 videos) |
| Wed | 2/22 | Section 2.2 Functions  
Section 2.3 Analyzing Graphs of Functions  
Quiz 5 | 2.2: Obj. 2.2.1-2.2.4 (4 videos)  
2.3: Obj. 2.3.1-2.3.5 (6 videos) |
| Wed | 3/1 | Section 2.4 A Library of Parent Functions  
Section 2.6 Combinations of Functions: Composite Functions  
Exam 1 review | 2.4: Obj. 2.4.1-2.4.2 (2 videos)  
(skip obj. 2.4.3)  
2.6: Obj. 2.6.1-2.6.2 (2 videos) |
| Mon | 3/6 | Exam 1 (Sections 1.1 – 2.6) | |
| Wed | 3/8 | Section 3.2 Polynomial Functions of Higher Degree  
Quiz 6 | 3.2: Obj. 3.2.1-3.2.4 (4 videos) |
| Wed | 3/15 | Section 5.1 Exponential Functions and their Graphs  
Section 5.2 Logarithmic Functions and Their Graphs  
Quiz 7 | 5.1: Obj. 5.1.1-5.1.4 (7 videos)  
5.2: Obj. 5.2.1-5.2.4 (5 videos) |
| Wed | 3/22 | No Class - Spring Break | |
| Wed | 3/29 | Section 5.3 Properties of logarithms  
Section 5.4 Exponential and Logarithmic equations  
Quiz 8 | 5.3: Obj. 5.3.1-5.3.4 (4 videos)  
5.4: Obj. 5.4.1-5.4.4 (6 videos) |
| Wed | 4/5 | Section 5.5 Exponential and logarithmic models  
Exam 2 review | 5.5: Obj. 5.5.2-5.5.5 (4 videos) |
| Mon | 4/10 | Exam 2 (Sections 3.2 – 5.5) | |
| Wed | 4/12 | Section 6.1 Linear and nonlinear systems of equations  
Section 6.2 Two variable linear systems  
Section 6.5 Systems of inequalities  
Quiz 9 | 6.1: Obj. 6.1.1 (1 video)  
(skip obj. 6.1.2 and 6.1.3)  
6.2: Obj. 6.2.1, 6.2.3 (2 videos)  
(skip obj. 6.2.2)  
6.5: Obj. 6.5.1-6.5.2 (2 videos) |
| Wed | 4/19 | Section 6.6 Linear Programming  
Section 8.1 Sequences and series  
Quiz 10 | 6.6: Obj. 6.6.1-6.6.2 (3 videos)  
8.1: Obj. 8.1.1-8.1.4 (5 videos) |
| Wed | 4/26 | Section 8.2 Arithmetic Sequences and partial sums  
Section 8.3 Geometric sequences and series  
Quiz 11 | 8.2: Obj. 8.2.1-8.2.2 (2 videos)  
8.3: Obj. 8.3.1-8.3.4 (4 videos) |
| Wed | 5/3 | Section 8.6 Counting Principles  
Quiz 12 | 8.6: Obj. 8.6.1-8.6.4 (12 videos) |
| Wed | 5/10 | Final Exam 3 review | |
| Mon | 5/15 | Final Exam (comprehensive – heavily weighted on sections 1.8, 5.1-8.6) | 4:00 pm – 6:00 pm |
Free Speech and Behavior Restrictions: It is your responsibility to arrive on time and stay until the end of class. You should plan ahead to avoid trips to the lavatory during class. If you arrive at class late, shut the door quietly behind you, tiptoe in, quietly be seated as close to the door as possible, and otherwise minimize the disturbance. I reserve the right to assign seating, especially during exams. Avoid bringing food and drink to class, especially if it has an aroma. Please don’t ever give me a gift; if you like what I do, please just say thank you.

General Education Program Student Learning Outcomes: (taken from [https://www.csusm.edu/ge/GEPSLOs/index.html](https://www.csusm.edu/ge/GEPSLOs/index.html))

1. Describe and/or apply principles and methods that are necessary to understand the physical and natural world.

3. Communicate effectively in writing, using conventions appropriate to various contexts and diverse audiences.

6. Think critically and analytically about an issue, idea or problem, considering alternative perspectives and re-evaluation of one’s own position.

7. Apply numerical/mathematical concepts in order to illustrate fundamental concepts within fields of study.

General Education Student Learning Outcomes for General Education Area B4:

B4.1: Explain and apply a variety of fundamental mathematical concepts, symbols, computations and principles.

B4.2: Determine which quantitative or symbolic reasoning methods are appropriate for solving a given problem and correctly implement those methods.

Course Student Learning Outcomes: Ability to solve equations and use them in word problems. Ability to maximize and minimize objective functions (linear programming) for use in economic decisions. Ability to use various kinds of functions in abstract problems and applications. Ability to use elementary counting principles and infinite series and apply them in word problems.

Writing Requirement: This course has a writing requirement of 2,500 words. This will be fulfilled by completing the exams, quizzes and homework. Work that is graded will be evaluated partly on the quality of the writing.

Credit Hour Policy Statement: Per the University Credit Hour Policy: Students are expected to spend a minimum of 7.5 hours per week outside of the classroom engaged in learning for this course.

ADA Statement: Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909, and by email sent to dss@csusm.edu. Students authorized by DSS to receive reasonable accommodations should meet with me during my office hours in order to ensure confidentiality.

This document is subject to change during the semester.