

# COLLEGE ALGEBRA

MATH 105, FALL 2014- BLDG. 30, ROOM 7 (4 UNITS)  
SECTION #49621 - TUES 10:15 AM - 12:20 PM - HYBRID

## INSTRUCTOR



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## COURSE

### DESCRIPTION

This course covers factoring; radicals and rational exponents; rational expressions; solutions of linear, quadratic, and polynomial equations and inequalities; absolute value equations and inequalities; graphing relations and functions; solutions of systems of equations; exponential and logarithmic functions; conics; partial fraction decomposition; complex numbers; binomial theorem, determinants and matrices of any order; arithmetic and geometric progressions; and proof by mathematical induction.

### PREREQUISITES

Math 90 with a grade of "C" or better, or by eligibility by placement on the VVC assessment exam. You may be asked to provide proof that you have met this prerequisite. Acceptable forms of proof include (but not limited to) VVC Assessment Test results, WebAdvisor or MicroGrade printout, or prerequisite challenge approval.

### TEXTBOOK / MATERIALS

#### COLLEGE ALGEBRA, 1ST EDITION, BY JULIE MILLER



Online access at Connect Math, accessed through Blackboard. You will need an access code. You can purchase the access code directly from the website (\$92.50) or from the Rams bookstore, (\$126.75) for the code only, or packaged with a loose-leaf version of the text (\$165.75).

**Online access is required** and includes complete digital access to your e-books, videos and homework. Your course Code is **TXW3M-AQYWD**.



The 2-week financial aid code for this course is EFDA0-0146B-6E87D-8A365. Note that it **does not** give add an additional two weeks to your course. You will need to extend your account **BEFORE** the end of the two weeks.

## CALCULATORS

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Non-graphing calculators are permitted in this course. The text will be illustrating problems using a graphing calculator on occasion; however, I am primarily assigning problems that will only require a non-graphing calculator, if any at all.

## THE HYBRID / “FLIPPED” CLASS FORMAT

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“Hybrid” means that your class is partially on-campus and partially online. This class will be different from any of your other math classes because you will be taking your lecture notes and doing some preliminary homework at home BEFORE you come to class. In class, we will expand on what you have already learned and practiced online. The goal is to provide an active-learning environment in the classroom rather than a static “listen to the teacher talk” environment. We will do this through review, discussion, classroom exercises and activities.

## HOMEWORK

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PRACTICE is a vital component in learning mathematics. You are to read each section in the book, take lecture notes (see below) and do the assigned homework at the Connect Math website. You may take each homework assignment as many times as you wish, and I will only count the highest grade for each.

There will be two types of homework assignments: “Video HW Assignments” which mirror the lecture notes and are due before you arrive at class, and “Review HW Assignments” which are a scrambled, combined extension and additional practice of the material after class. I will drop the 4 lowest scores from your Video Homework assignments and the 2 lowest scores from your Review Homework assignments at the end of the semester before calculating your semester grade.

## LECTURE NOTES AND VIDEOS

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To watch the lecture videos I have personally produced, there are two options: you can go to my webs site, [www.mathvideos.net](http://www.mathvideos.net), and click on the College Algebra button. This will give you the ability to download the videos or watch the closed-caption version, however they will not stream on most devices. The second option is to follow the link and directions within Blackboard, which will take you to a location where the videos will stream for you.

Above each chapter at [www.mathvideos.net](http://www.mathvideos.net), there is a link to download blank lecture notes. Please download and print these out so that you can take notes from the videos listed in the table, organized by section and page number (in the notes).

## QUIZZES

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There will be online “practice quizzes” due before each class meeting, as well as on-campus quizzes during each class meeting, excluding the days you take the midterm and final exams. You may take the practice quizzes over again until you are satisfied with the score. Content on the practice quizzes will not be the same as that of the on-campus quizzes.

## CHAPTER TESTS

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We will have 7 online chapter tests (chapters 5 and 6 are combined as a single "chapter"), one midterm, and one final exam. I will drop your lowest-scoring chapter exam. You will get ONE 120-minute attempt at each chapter test. It is highly recommended that you re-start your browser before taking any online tests, especially if you have been online a long time. The Java software tends to “junk up” your memory cache and sometimes needs to be cleared before an exam.

No graphing calculators will be allowed for use on any of the chapter tests, midterm or final exam. You may use a 3”x5” cheat sheet on both the midterm and final exam.

## DISCUSSION BOARD

There will be a weekly online discussion board at BlackBoard. Each week, you will be required to post at least one time to the weekly discussion board forum with a relevant post (not just a trite phrase), as well as respond to one of your classmates' posts.

## ACADEMIC SUPPORT

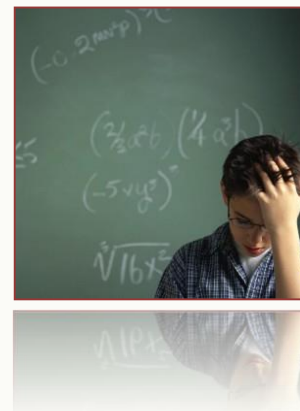
You are strongly encouraged to get tutoring or go to the Math Success Center, study in groups, and see me for help outside of class. All of these are free! Students that get help outside of class are typically much more successful than those that do not.

Regular Math Success Center hours are:

Monday-Friday 8:30 AM - 5:00 PM (starting the second week of class)

The Math Lab is located in building 42 (the Academic Commons). Outside of these those hours, please go to the information booth at the east end of the Tech building to sign in for tutoring help. The MSC will begin operation the second week of the semester.

My office hours are listed at the start of this syllabus. Appointments are also available if you are unable to meet me at those times. Online office hours are also available...



## STUDENT ACCESS

*Students with special needs are encouraged to meet with instructors to discuss the opportunity for academic accommodation and be referred to disabled student program and services per Administrative Procedure (AP 3440).*

*If you have a learning disability or physical need that requires special accommodation, please advise me prior to 09-02-14 (the start of the second week of class).*

## SCHOLASTIC DISHONESTY



While students may work together on the researching of any assignment, it is expected that each of their writing assignments reflect substantial individual effort. Any student who commits plagiarism or is found to have cheated on a scheduled exam is subject to a zero score for that specific exam which may result in a term grade of "F" for this course. Students should be aware that cases of cheating and/or plagiarism will be forwarded to the appropriate college administrator promptly. The college administration has a range of sanctions that may be imposed including, but not limited to, academic suspension or expulsion from the college.

## ATTENDANCE

**YOU ARE REQUIRED TO ATTEND CLASS EVERY DAY. AFTER 4 HOURS OF ABSENCE, YOU MAY BE DROPPED FROM THIS CLASS. IT IS YOUR RESPONSIBILITY TO KEEP YOUR ENROLLMENT STATUS CURRENT. YOU RISK AN "F" IF YOU STOP ATTENDING WITHOUT OFFICIALLY WITHDRAWING. DO NOT BRING FRIENDS OR CHILDREN TO CLASS. PLEASE TURN ANY CELL PHONES OR PAGERS TO SILENT MODE DURING CLASS TIME. NO CELL PHONES WILL BE ALLOWED ON YOUR DESK DURING EXAMS. WE ARE HERE TO LEARN; PLEASE REFRAIN FROM TEXTING DURING CLASS.**

*Class attendance is not a measure of performance or proficiency. Whether a student is just physically present in the class is not a valid basis for grading. Reference Title 5 Section 55002 of the California Code of Regulations: (A) Grading Policy. The course provides for measurement of student performance in terms of stated course objectives and culminates in a formal, permanently recorded grade based upon uniform standards in accordance with section 55758 of this Division. The grade is based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of written expression that may include essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.*

## IMPORTANT NOTES ABOUT TECHNOLOGY



This course requires reliable computer access. Please ensure your computer is in good repair at the start of the semester. It is suggested that before any major assignments, you re-start your browser to clear any memory caches which may cause issues while testing. Java software tends to “junk up” your browser at times. While documented outages may occur, it is the student's responsibility to meet all deadlines in this course. If your internet service at home is unreliable, do not wait until the last day to start assignments. There are plenty of computers that you are able to use on campus.

At the start of the semester, please go to [www.connectmath.com/downloads](http://www.connectmath.com/downloads) and install the latest versions of many key plug-ins and movie players. If you ever find your computer running slow, sometimes the cause may be too many versions of Java running in your system. If this is the case, go into your Control Panel, uninstall both Java and Aleks. Then go to the download page mentioned above and re-install Java first, followed by Aleks. This will solve many of the issues that students typically face.

## VVC CALENDAR



|   |                   |
|---|-------------------|
| <b>Fall Term Begins</b>                         | <b>Aug. 25</b>    |
| <b>Labor Day Holiday (college closed)</b>       | <b>Sept. 1</b>    |
| <b>Last Day to Drop without a "W" grade</b>     | <b>Sept. 7</b>    |
| <b>Last Day to Drop and still receive a "W"</b> | <b>Oct. 10</b>    |
| <b>Veteran's Day Holiday (college closed)</b>   | <b>Nov. 10</b>    |
| <b>Thanksgiving Break (no classes)</b>          | <b>Nov. 27-28</b> |
| <b>Fall Semester Ends</b>                       | <b>Dec. 12</b>    |

## STUDENT LEARNING OUTCOMES

Upon completion of the course the student can:

1. Recognize, graph and compute zeros for polynomial, rational, radical, logarithmic and exponential equations.
2. Apply matrix algebra to determine the solution of a system of linear equations.
3. Apply concepts of analytic geometry to the conic sections.
4. Demonstrate knowledge of geometric and arithmetic sequences.

## OUR CLASS SCHEDULE

|     |       | In-Class Activity   | Do After Class      | Have Completed Before Next Class        |
|-----|-------|---|---------------------|---|
| T   | 08.26 | Introduction  |                     | Video HW 1.1-1.4; practice quiz 1.1-1.4 |
| T   | 09.02 | Sections 1.1-1.4  | Review HW 1.1-1.4   | Video HW 1.5-1.8; practice quiz 1.5-1.8 |
| T   | 09.09 | Sections 1.5-1.8  | Review HW 1.5-1.8   | Video HW 2.1-2.4; practice quiz 2.1-2.4 |
|     |       | *Chapter 1 online test due by Friday night, Sept 12                 |                     |   |
| T   | 09.16 | Sections 2.1-2.4  | Review HW 2.1-2.4   | Video HW 2.5-2.8; practice quiz 2.5-2.8 |
| T   | 09.23 | Sections 2.5-2.8  | Review HW 2.5-2.8   | Video HW 2.5-2.8; practice quiz 3.1-3.4 |
|     |       | *Chapter 2 online test due by Friday night, Sept 26                 |                     |   |
| T   | 09.30 | Sections 3.1-3.4  | Review HW 3.1-3.4   | Video HW 3.5-3.8; practice quiz 3.5-3.7 |
| T   | 10.07 | Sections 3.5-3.7  | Review HW 3.5-3.7   | review for midterm                      |
| Fri | 10.10 | OPTIONAL Midterm Review session from 9-11 am, room to be determined |                     |   |
|     |       | *Chapter 3 online test due by Sunday night, Oct. 12                 |                     |   |
| T   | 10.14 | <b>Midterm - Covers Chapters 1-3</b>                                |                     | Video HW 4.1-4.3; practice quiz 4.1-4.3 |
| T   | 10.21 | Sections 4.1-4.3  | Review HW 4.1-4.3   | Video HW 4.4-4.6; practice quiz 4.4-4.6 |
| T   | 10.28 | Sections 4.4-4.6  | Review HW 4.4-4.6   | Video HW Ch 5; practice quiz Ch 5       |
|     |       | *Chapter 4 online test due by Friday night, Oct. 31                 |                     |   |
| T   | 11.04 | Chapter 5   | Review HW Chapter 5 | Video HW Ch 6; practice quiz Ch 6       |
| T   | 11.11 | Chapter 6   | Review HW Chapter 6 | Video HW Ch 7; practice quiz Ch 7       |
|     |       | *Chapters 5-6 online test due by Friday night, Nov 14               |                     |   |
| T   | 11.18 | Chapter 7   | Review HW Chapter 7 | Video HW 8.1-8.3; practice quiz 8.1-8.3 |
|     |       | *Chapter 7 online test due by Friday night, Nov 21                  |                     |   |
| T   | 11.25 | Sections 8.1-8.3  | Review HW 8.1-8.3   | Video HW 8.4-8.5; practice quiz 8.4-8.5 |
| T   | 12.02 | Sections 8.4-8.5  | Review HW 8.4-8.5   | Video Review (Ch 8 and Final Exam)      |
|     |       | *Chapter 8 online test due by Friday night, Dec 5                   |                     |   |
| T   | 12.09 | <b>Final Exam - Covers Chapters 4-8</b>                             |                     |   |

## GRADING

It is your responsibility to be aware of your grade. Your final grade will be determined as follows:

|                          |                   |             |
|--------------------------|-------------------|-------------|
| Online Chapter Tests     | 20% of your grade | A: [88,100) |
| Online Video Homework    | 10% of your grade | B: [78,88)  |
| Online Review Homework   | 10% of your grade | C: [70,78)  |
| Online Practice Quizzes  | 5% of your grade  | D: [65,70)  |
| Online Discussion Board  | 5% of your grade  | F: [0, 65)  |
| On-campus Quizzes        | 5% of your grade  |             |
| Classroom Activities     | 10% of your grade |             |
| Midterm Exam, Final Exam | 35% of your grade |             |



At the **end** of the semester, the one lowest grade in each of the grade categories listed above will be dropped prior to computing your term grade, with the following exceptions:

- Your 4 lowest Video Homework grades and the 2 lowest Review Homework grades will be dropped
- No grade will be dropped from the Midterm Exam and Final Exam category