

Mt. San Antonio College
College Algebra, Math 130, (crn 22091)
Fall 2019 Course Syllabus

Professor: Tim Takashima

Office Hours: T 12:00-1:00 PM, W 7:30-9:00 AM,
Th 12:00-1:00 PM, F 7:15-7:45 AM

Math 130 (crn 22091) TTh 7:30-9:35 AM

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Course Description

MATH 130

College Algebra

Course description: This course consists of: *A college-level course in algebra, that includes: a study of real numbers and sets, algebraic functions and relations, radicals and exponents, linear and quadratic equalities and inequalities, exponential and logarithmic functions, systems of linear and quadratic equations, complex numbers, series, theory of equations, mathematical induction and binomial formula.*

Sections covered: Sections covered: 1.2, 1.4 – 1.7, 2.1 – 2.8, 3.1 – 3.6, 4.1 – 4.6, 5.1, 5.2, 5.6, 5.7, 7.1-7.5

4 Units letter grade (Degree Applicable)

Prerequisite for Math 130: MATH 71 or MATH 71B or appropriate placement.

****Rule of thumb:*** for every hour in class, you should spend 2 hours outside of class to do homework and studying. These hard-linked courses meet 4+ hours per week → you should spend a minimum of 8+ hours per week outside of classroom.

Required Text and Materials

- Textbook: **College Algebra** twelfth edition by Lial, Hornsby, Schneider & Daniels.
- Calculator: scientific two line (No graphing calculators allowed/phones...)
- Pencil (exams/quizzes), eraser, ruler, 8 ½ x 11 inch loose leaf notebook paper for homework.

Grading Policy:

Math 130: **A** = 89.5% or higher, **B** = 79.5% - 89.4%, **C** = 69.5% - 79.4%,
D = 59.5% - 69.4%, **F** = below 59.4%

Note: you must take the final exam for this grading scale to hold. You will receive an “F” for the course grade if you fail to take the final.

Grade Distribution

MATH 130

Homework: 5%, Homework is very important to your success, and is collected most weeks. And is graded on a full credit, half credit, no credit basis. Try to work out all homework problems yourself without assistance. Read the problem several times and come back to problems you have difficulty in at a later time. Try not to become frustrated **Stick with it**. Please do not wait to the last minute to do your assignments.

Quizzes: 8%, There will be approximately 3 - 6 quizzes, based on homework and in-class worksheets. **ABSOLUTELY NO MAKE UP FOR QUIZZES!** (lowest score dropped)

Worksheets & Board work: 6%, worksheets/group activities & board work.

Exams: 51%, there will be **3 in-class exams** each worth **17% each**. All exams are closed notes and books. **No** electronic devices allowed during the exam (phones, smart watches,...) only a 2- line scientific calculator. **Most** questions will come from homework type and /or worksheets. With some from in-class lectures. (exam #1 **Thursday, September 19;** exam #2 **Thursday, October 17;** exam #3 **Thursday, November 14)**

Final exam: 30%, and is comprehensive and will be given on **Tuesday, December 10, from 7:30-10:00 AM** The final exam percentage **may** replace your lowest exam score percentage if it is **greater than or equal to 77%**.

Tentative schedule

	Tuesday		Thursday
8/27	1,2, 1.4	8/29	1.5, 1.6
9/3	1.7, 2.1	9/5	WS
9/10	2.2, 2.3	9/12	2.4, 2.5
9/17	WS	9/19	T#1
9/24	2.6, 2.7	9/26	2.8, 3.1
10/1	3.2, 3.3	10/3	WS
10/8	3.4, 3.5	10/10	3.6, 4.1
10/15	WS	10/17	T#2
10/22	4.2, 4.3	10/24	4.4, 4.5
10/29	4.6, 5.1	10/31	WS
11/5	5.2, 5.6	11/7	5.7, 7.1
11/12	WS	11/14	T#3
11/19	7.2, 7.3	11/21	7.2, 7.3
11/26	WS	11/28	Holiday
12/3	Rev	12/5	Rev
12/10	Final 130, 7:30 AM		

Classroom Policies/ Expectations

Attendance:

- You are expected to attend each class from the beginning to the end. If you need to leave early for the day due to prior commitment, please let me know ahead of time, as a courtesy, and sit nearest to the door. (**Remember:** attending class is most important with worksheets/homework a close second)
- You **may** be dropped from the class if you absent more than 3 days prior to drop with a “W” deadline. You **may** be dropped from the class if you consistently arrive late or leave early. 2 late arrivals/leaving early = 1 absence.
- Attendance will be taken via seating chart. (roll is taken at the beginning of class, a second roll may be taken near the end of class)
- **All math is based on fundamental principles and definitions.** Know and understand them. Try not to learn by memorizing. Math requires strong steady effort and class participation.

Important Drop Information

- Last day for refund 9/6
- Last day to add 9/6.
- Last day to drop **without** receiving “W” grade 9/8.
- Last day to drop **with** a “W” grade 11/1.
- It’s your responsibility to drop the course on a timely manner to avoid a “W” or a low grade so DO NOT assume that you will be dropped if you stop attending class.

Classroom rules

- Cell phones (any electronic device) shall be off or in silent mode during class. Phones (any ED) will not be visible while class is in session. All students have 20 extra credit quiz points to start this course. Any phone visible or making a sound during class time will result in a 2 points deduction from ALL students’ total of extra credit.
- NO WORK = NO CREDIT. You must show all work to guarantee to receive full credit.
- If you miss an exam: in an extreme cases, with documentation, you may either receive a weighted average of your exams or the class average for that exam, or equal to your lowest exam score, whichever one is lower. (final replacement percentage possibility)
- All of Mathematics is based on fundamental principles and definitions. Try not to learn Mathematics by memorizing. **To be successful in math requires a strong steady effort and participation in class i.e. ask plenty of questions if you do not understand something.**
- Keep all graded assignments, quizzes, exams, notes, & handouts...

Resources

Tutoring: free tutoring is available at TMARC, or the Learning Assistance Center. There is also online options. I may be able to stay after class for a few questions, please let me know ahead of time if you would like me to stay after class. Please take advantage of free tutoring as soon as you find yourself having difficulty doing your homework and don’t ever think that you can catch up later. Catching up later is a very difficult task! Get study groups started early!

Accommodations: those who believe they may need accommodations in this class are encouraged to contact ACCESS (Accessibility Resource Centers for Students) in Student Services Building (9B) (909-274-4290), as soon as possible to better ensure such accommodations are implemented in a timely fashion.

Academic Dishonesty Policy

Academic dishonesty of any form will not be tolerated. If you cheat and/or plagiarize (refer to file 'Mt.SAC Cheating & Plagiarism' under file link in course studio for definitions of cheating and plagiarism) you will receive a "0"/ "F" for the exam or assignment. Also it will be reported and remain on your academic record.

Student Learning Outcomes (SLOs)

MATH 130

- Students will be able to simplify an expression that is either polynomial, rational, radical, exponential or logarithmic.
- Students will be able to solve an equations that is either polynomial, rational, radical, exponential, logarithmic, or literal.
- Students will be able to graph a function (or relation) that is either polynomial, rational, exponential or logarithmic.

Course Measurable Objectives (CMOs)

MATH 130

- Simplify expressions, including polynomial, rational, radical, exponential and logarithmic.
- Solve equations and inequalities, including linear, higher-order polynomial, rational, radical, exponential, logarithmic and literal.
- Perform operations with functions including composition.
- Determine domain, range and inverse of functions.
- Graph functions and relations such as: piece-wise defined functions, polynomial functions, rational functions, exponential functions, logarithmic functions, linear transformations of basic functions and circle.
- Solve systems of equations (linear and non-linear) by methods of substitution, elimination, graphing and matrices.
- Analyze a variety of applied problems (including variation problems) and work with the resulting equations or functions to respond to the problems, using complete sentence responses.
- Expand powers of binomials using the Binomial Theorem.
- Prove statements using mathematical induction.
- Recognize patterns in sequences and series (arithmetic and geometric) to determine terms and find sums, using sigma notation as appropriate.
- Demonstrate properties of matrices.