

Math 130 Syllabus

(last updated August 27, 2011)

College Algebra

Section 21(CRN 23451): MW 7:00pm-9:05pm

61-3319 (Building 61, Room 3319)

Fall 2011

Instructor:	David Beydler
Office:	61-1626 (Building 61, Room 1626)
Office Hours (tentative):	M 1-4pm, Tu 4:30-5:30pm, W 3-4pm, Th 12-1pm
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Description: A college-level course in algebra. 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.

Prerequisites: MATH 71 or MATH 71B or qualifying score on current department placement test

Course Objectives:

1. Simplify expressions, including polynomial, rational, radical, exponential and logarithmic.
2. Solve equations and inequalities, including linear, higher-order polynomial, rational, radical, exponential, logarithmic and literal.
3. Perform operations with functions including composition and determine the domain, range and inverse of a function.
4. Graph functions and relations, including polynomial, rational, exponential and logarithmic functions (using translations).
5. Solve systems of equations (linear and non-linear) by methods of substitution, elimination, graphing and matrices.
6. Analyze a variety of applied problems (including variation problems) and work with the resulting equation or function to respond to the problem, using complete sentence responses.
7. Expand powers of binomials using the Binomial Theorem.
8. Prove statements using mathematical induction.
9. Recognize patterns in sequences and series (arithmetic and geometric) to determine terms and find sums, using sigma notation as appropriate.
10. Demonstrate properties of matrices.

Student Learning Outcomes: The department Student Learning Outcomes (SLOs) can be found at math.mtsac.edu/slo.html

Quizzes: We'll have a quiz almost every Wednesday covering the material from the previous week. Quiz problems will be very similar to homework problems. No make-ups for quizzes, but your lowest two quiz scores will be dropped.

Tests: We'll have 3 tests tentatively on September 28, October 26, and November 23 (these are Wednesdays).

Final Exam: The final exam will be cumulative and will be on Monday, December 12, 7:30pm-10:00pm in 61-3319 (Building 61, Room 3319). No make-up final will be allowed, unless there's an extreme emergency.

Homework: Homework problems from the textbook will be assigned and collected. They'll be due in 4 batches (at each of the 3 tests, plus 1 at the final exam). Unfortunately, I don't accept late homework.

Calculators: No calculators will be allowed on quizzes, tests, and final exam. So, as much as possible, try doing the homework without calculators. You'll get better at doing calculations very quickly.

Grading: You'll get an A, B, C, D, or F. You are guaranteed the following grades:

90-100%: A
80-89%: B
70-79%: C
60-69%: D

Here is how I will calculate your class grade:

Homework: 5%
Quizzes: 15%
Tests: 45% (i.e., 15% each)
Final Exam: 35%

Textbook:

College Algebra (10th edition), by Lial/Hornsby/Schneider, 2008

Accommodations: Students with disabilities should be sure to contact the DSP&S Office. Also, please feel free to stop by my office so we can discuss your particular learning needs.

Academic honesty: Of course, don't cheat. I will follow the policy as outlined in the school catalog (see <http://www.mtsac.edu/catalog/>), and will report any violations of academic honesty to the Office of Student Life. Also, you'll receive a zero score on the assignment/exam.

Important Dates:

9/5 (Mon) - Campus closed for Labor Day
9/9 (Fri) - Last day to add
9/16 (Fri) - Last day to withdraw without a W
11/11 (Fri) - Campus closed for Veteran's Day
11/18 (Fri) - Registration for 2012 Winter Intersession begins
11/24 - 11/27 (Thurs-Sun) - Campus closed for Thanksgiving
12/12 - 12/18 (Mon-Sun) - Final exams

Miscellaneous:

- No books or notes will be allowed during the quizzes, tests, and final exam. Just you, your brain, and a pencil (and sometimes a calculator).
- Quizzes and tests will start at the beginning of class, so please be sure to come on time.
- I will post all homework assignments and test solutions on the course website:
<http://davidstutoring.com/math130.html>
- Please come to my office hours if you have questions. I don't bite.
- When in class, respect your fellow classmates and teacher (me!).
- Please eat before or after class, and turn cell phones off/silent. You know, common sense stuff.
- **Free** tutorial services are available in the MARC (Building 61, first floor).

Also, any of the information in this syllabus could change anytime. I'll try to e-mail important announcements and post them on the website, but ultimately you are responsible for announcements made in class, so I'd recommend getting the phone number or e-mail address of a classmate or two, just in case.

And finally, a joke that I saw on a coffee cup: "There are 3 kinds of people: those who can count and those who can't."