# MATH 161: Algebra for Business and Economics

MWF Gruening 206 10:30 - 11:30 am
http://www.dms.uaf.edu/∼eallman/classes/161-fall-2012/161-2012.html

**Instructor:** Elizabeth S. Allman

**Contact Details:** Chapman 308B, e.allman@alaska.edu and 474-2479.

**Office Hours:** (tentative) M 9:30, W 1:00, F 11:30 and by appointment.

**Prerequisites:** DEVM105 or DEVM106 with a grade of C or better, or placement test results. Consult the catalog p. 33 for details. No exceptions will be made.

**Textbook:** *Precalculus, Mathematics for Calculus*, custom edition, Stewart, Redlin, and Watson, Brooks Cole. You may purchase a bundled version of course materials including access to WebAssign online at `http://www.cengagebrain.com/micro/uafms`. You will need to purchase a WebAssign access code either with your textbook or online.

**Midterms:** Friday, September 28; Monday, October 29; Friday, November 30

**Final Exam:** Friday, December 14, 10:15 - 12:15

Course Overview and Goals:

The focus of this course is the elementary functions, including polynomials, rational functions, exponentials, and logarithms. We will also cover some topics from finance, taking up a few applications. This course was designed for students intending to take (non-trigonometric) calculus.

Course Mechanics:

**Class meetings** will be run as interactive lectures, to the extent possible given the enrollment. That means that while I will be presenting material at the board, and you will be taking notes, I will also be asking for suggestions, ideas, and questions about the material as we go along. I don't expect 'correct' answers, but I do expect you to be actively following and participating (and taking notes) — that makes the class more interesting for us all.

**Class attendance** is expected, although I will not formally take roll. If you miss a class, you should get notes from another student. Homework assignments will be posted on the course web page either right before class or soon after class is over. You should bookmark the homework web page, as this is where you will find assignments, due dates, and updates. It is your responsibility to know the assignments, due dates, and class schedule by keeping up to date with the electronic material.

**Homework** will be assigned in each class period and is due the following class period. For each hour of lecture, you should expect to spend between two and three hours on homework. The homework assignment is broken into three parts:

1. Practice problems: Odd problems from the textbook. Complete solutions are available in the solutions manual. You should check that you have correct answers.

2. WebAssign Quiz problems: About five WebAssign problems will be assigned each class. You will have three attempts to get the correct answer, and your last attempt is the one that is graded. These should be completed after the practice problems, and serve as immediate feedback. Use your results to understand which topics you have not grasped completely and go back and study more.

   The class key for WebAssign homework is

   **uaf 6765 3686**

3. Graded problems: Even problems from the textbook. These will be graded by the grader assigned to this course.

Homework is due at the beginning of class on its due date, the next class meeting after the assignment is given. I will not accept *any* late homework that has not been cleared ahead of time or is not due to a genuine emergency (e.g., a death in the family).

Your written assignment should be completed in pencil, be neat, and orderly with sufficient space for each problem. At the top of the page, write your name, the date, MATH 161, the assignment number, and the assignment. Staple multiple pages together neatly. An example header is given on the website. The grader may decide to not grade sloppy papers or those without appropriate headings and problems.

**Missed examinations** that are not approved in advance will result in an 'F' on that exam. No make-up exams will be given except in extreme circumstances (e.g., family death, documented illness, etc.). Notifying me by email or a note that you will miss an exam is not sufficient for advance approval; you must speak with me to be excused.

**Tutoring** is available at no cost, on a walk-in basis, at the Math Lab in Chapman 305. Hours will be announced, and posted on the door. A good way to use the Math Lab is to simply go there to do your homework, so that if any questions come up you can get immediate help.

**Calculators** will not be allowed on any examinations. This will ensure that testing conditions are equal for everyone. However, at some points during the semester, you will need a calculator for the current topic and homework problems. At these times, you may use only a non-graphing calculator.

**Auditing** of this course will only be allowed for those who agree to attend regularly, as evidenced by completion of midterm exams and all homework.

**Grades:**

There will be three midterm exams and a cumulative final exam in MATH 161. In addition, there will be weekly homework assignments and WebAssign quizzes. Grades will be assigned using the following weights:

| | |
|---|---|
| Homework | 25% |
| WebAssign Quizzes | 20% |
| Midterm 1 | 10% |
| Midterm 2 | 10% |
| Midterm 3 | 10% |
| Final Exam | 25% |

*Grade Bands:* A, A- (90 - 100%); B+, B, B- (80 - 89%); C+, C, C- (70 - 79%); D+, D, D- (60 - F%); 69 (0 - 59%). I do not curve grades.

The grade you earn in this course will depend entirely on the work you do. Every piece of work (HW, quiz, exam, etc.) counts towards your final grade so you can not slack on anything and expect to pass. Again, no grade will be curved in this class.

If, by October 26 (the late withdrawal date), I calculate that you do not have an average of 50% on the homework and quizzes, you will be **dropped from this course**. This is more than ample evidence that a student is not seriously engaged in MATH 161. Also, please note that there is only *one* midterm before this withdrawal date; this may effect the timing of your decision to (or not to) withdraw.

Finally, **in order to pass this class you must earn at least a 60% on the final.** A final exam score less than 60% will result in a grade of F. If you do not earn over 60%, then you are not ready to move onto MATH 262.

**Tentative Schedule:**

| Monday | Wednesday | Friday |
|---|---|---|
| | | 8/31: 1.1 |
| 9/3: No class | 9/5: 1.2 | 9/7: 1.3 |
| 9/10: 1.4 | 9/12: 1.5 | 9/14: 1.6 |
| 9/17: 1.7 | 9/19: 1.8 | 9/21: 1.9 |
| 9/24: Review | 9/26: 1.10 | 9/28: **Exam 1** |
| 10/1: 2.1 | 10/3: 2.2 | 10/5: 2.3 |
| 10/8: 2.4 | 10/10: 2.5 | 10/12: 2.6 |
| 10/15: 2.7 | 10/17: 3.1 | 10/19: 3.2 |
| 10/22: 3.3 | 10/24 Review | 10/26: 3.4 |
| 10/29: **Exam 2** | 10/31: 3.7 | 11/2: 4.1 |
| 11/5: 4.2 | 11/7: 4.3 | 11/9: 4.4 |
| 11/12: 4.5 | 11/14: 4.6 | 11/16: 10.1 |
| 11/19: 10.2 | 11/21: 10.9 | 11/23: No class |
| 11/26: Review | 11/28: Finance | 11/30: **Exam 3** |
| 12/3: Finance | 12/5: Finance | 12/7: Series |
| 12/10: Review | | 12/14: **Final 10:15** |

**University and Department Policies:**

*Course accommodations:* If you need course adaptations or accommodations because of a disability, please inform your instructor during the first week of the semester, after consulting with the Office of Disability Services, 203 Whitaker (474-7403).

*Detailed Policies:* Your work in this course is governed by the UAF Honor Code. The Department of Mathematics and Statistics has specific policies on incompletes, late withdrawals, and early final exams, some of which are listed below. A complete listing can be found at

`http://www.dms.uaf.edu/dms/Policies.html`.

*Prerequisites:* The prerequisite for MATH 161 is DEVM105 or DEVM106 with a grade of C or better, or placement test results. Consult the catalog p. 33 for details.. Students not meeting this prerequisite are not eligible to take this course and will be dropped.

*Late Withdrawal:* This semester the last day for withdrawing with a 'W' appearing on your transcript is October 26.

*Graded Coursework:* Please keep all graded work for MATH 161 until final grades have been assigned.

*Academic Honesty:* Academic dishonesty, including cheating and plagiarism, will not be tolerated. It is a violation of the Student Code of Conduct and will be punished according to UAF procedures.

*Courtesies:* As a courtesy to your instructor and fellow students, please arrive to class on time and turn your cell phones and iPods off during class.