

# Syllabus

**Class:** MAT 110 “College Algebra” (3 credits)

**Meeting Times:** 11–11:50 MWF (in room 258)

**Instructor:** Peter L. Vachuska, office 249, phone 335-5250 ext. 249. I can also be reached by email at [Peter.Vachuska@uwc.edu](mailto:Peter.Vachuska@uwc.edu).

**Office Hours:** 10–10:50 M-F.

**Textbook:** *College Algebra, 5e* by Michael Levitan

**Grading:** Grades will be based on five hour exams, each 100 points and a final worth 200 points. If you miss an exam or wish to retake the exam because of your exam grade, you must arrange with me for this to be done outside of class and these exams will not be returned to you. If you retake an exam, I will use the higher of the two scores in computing your final grade. You may use calculators or graphing calculators on exams. You may **not** use 1) Laptop or a portable/handheld computer, 2) Calculator that has typewriter-like keypad, 3) Electronic writing pad or pen-input/stylus-driven device, 4) Pocket organizer, or 5) Cell phone calculator. *You must show your steps on exams.*

My grading scale is: 100-90% being the A's, 90-80% being the B's, etc. ..., (with top/bottom 2 percents for  $+/-$  in each category).

**Material Covered:** See schedule on other side. Note that all handouts are available at <http://www.geocities.com/pvachuska/110/>

## To do well in this class:

- Attend class
- Let the instructor know if you don't understand something
- Read the book
- Do the exercises after each section
- Don't fall behind
- Make use of office hours, learning center, study groups, etc.
- Go beyond the minimum amount that you need to know.
- Do all of the review problems before an exam.

## Important Dates:

*September 15:* Last day to add or to change from or to pass/fail or from audit to credit.

*November 10:* Last day to drop or to change from credit to audit.

*November 27-28:* Thanksgiving Recess.

*December 15:* Last day of classes.

*December 19:* Final Exam, 1:00–3:00.

## Schedule and Suggested Problems\*

Sept 03	Section 1.8	Complex Numbers	p. 70: 1-63 odd
Sept 05	Section 2.1	Linear Equations	p. 85: 5-43 odd
Sept 08	Section 2.3	Quadratic Equations	p. 113: 1-57 odd
Sept 10	Section 2.3	More Quadratics	p. 113: 59-99 odd
Sept 12	Section 2.5	Inequalities	p. 131: 55-59, 69-93 odd
Sept 15	Section 2.6	Absolute Value	p. 138: 1-27 odd
Sept 17	Review		
Sept 19	Exam 1		
Sept 22	Section 3.2	Functions	p. 167: 1-39odd
Sept 24	Section 3.3	Graphs of Functions	p. 181: 9-15,41-55odd
Sept 26	Section 3.4	Lines	p. 195: 9-43odd
Sept 29	Section 3.5	Function Algebra and Inverses	p. 212: 1-53odd
Oct. 01	Section 4.1	Quadratic Functions	p. 239: 1-17,31-37odd
Oct. 03	Section 4.2	Polynomial Functions	p. 251: 17-27odd
Oct. 06	Review		
Oct. 08	Exam 2		
Oct. 10	Section 4.3	Division	p. 257: 1-19odd
Oct. 13	Section 4.4	Remainder and Factor Theorems	p. 260: 1-37odd
Oct. 15	Section 4.5	Factors and Zeros	p. 270: 25-51odd
Oct. 17	Section 4.6	Complex, Real and Rational Zeros	p. 280: 13-29odd
Oct. 20	Section 5.1	Rational Functions	p. 307: 1-27odd
Oct. 22	Section 5.2	The Circle	p. 314: 1-35odd
Oct. 24	Review		
Oct. 27	Exam 3		
Oct. 29	Section 6.2	Exponential Functions	p. 368: 1-5,25-35,51-59odd
Oct. 31	Section 6.3	Logarithmic Functions	p. 381: 1-77odd
Nov. 03	Section 6.4	Properties of Logs	p. 389: 1-55odd
Nov. 05	Section 6.5	Exponential and Log Equations	p. 395: 1-29odd
Nov. 07	Section 7.1	Systems of Two Equations	p. 415: 11-41odd
Nov. 10	Section 7.3	Systems of Three Equations	p. 430: 1-17odd
Nov. 12	Review		
Nov. 14	Exam 4		
Nov. 17	Section 8.1	Matrices	p. 470: 1-29odd
Nov. 19	Section 8.2	Matrix Operations	p. 477: 1-33odd
Nov. 21	Section 8.3	Inverses of Matrices	p. 489: 1-35odd
Nov. 24	Section 8.4	Determinants	p. 485: 1-5,11-19odd
Nov. 26	Section 8.6	Cramer's Rule	p. 504: 1-7odd
Dec. 01	Section 9.1	Sequences and Series	p. 519: 1-35odd
Dec. 03	Section 9.2	Arithmetic Sequences and Series	p. 525: 1-29odd
Dec. 05	Section 9.3	Geometric Sequences and Series	p. 534: 1-49odd
Dec. 08	Review		
Dec. 10	Exam 5		
Dec. 12	Review		
Dec. 15	Extra Review or Buffer if schedule needs adjusting		
Dec. 19	Final Exam		

\*You may skip any parts of problems that require use of a graphing calculator if you don't have one. Graphing calculators are not required but may be checked out of the library.