

## Math 91 – Intermediate Algebra Fall 2013 TTH

### General Information

<b>Name</b>	Dr. Voldman	<b>Textbook/Author</b>	Intermediate Algebra, 4 <sup>th</sup> , Blitzer
<b>Office</b>	Room 2764	<b>Chapters Covered</b>	4,7-14
<b>Phone</b>	355-6299	<b>Office Hours: MW 7:45-8:15, 10:00-10:30, TTH 9:00-10:00</b>	<b>Credit Units: 5 Time: TTH12:55-15:25 CRN: 10644</b>
<b>E-mail</b>	alex.voldman@imperial.edu	IVC Prerequisite with C or better	Math 81 (Beginning Algebra)

### Grading Scale

<b>90-100%</b>	<b>A</b>	<b>80-89%</b>	<b>B</b>	<b>70-79%</b>	<b>C</b>	<b>60-69%</b>	<b>D</b>	<b>0-59%</b>	<b>F</b>
----------------	----------	---------------	----------	---------------	----------	---------------	----------	--------------	----------

### Grade Distribution

<b>Homework</b>	<b>Exams</b>	<b>Class work</b>	<b>Final</b>
<b>700 points</b>	<b>300 points</b>	<b>100 points</b>	<b>200 points</b>

<b>Participation/Class work</b>	<b>5%</b>
<b>Homework</b>	<b>10%</b>
<b>Exams</b>	<b>60%</b>
<b>Final</b>	<b>25%</b>

### General Guidelines

1. Late work (homework, projects, etc) is not accepted	5. Bring your book, ruler to class every day
2. School policy: No food or beverages are allowed in the classroom	6. It is your responsibility to drop before the W deadline
3. Missed assignments are recorded as zeros	7. It is your responsibility to keep notes, syllabus, handouts
4. School policy: No children are allowed in the classroom	

### Course Description:

A further study of the concepts of algebra. Topics covered include linear and quadratic equations, relations, functions and graphs, systems of equations, logarithmic and exponential functions, conic sections, and sequences and series.

### Course Objectives:

1. Demonstrate an understanding of radical expressions and equations.
2. Demonstrate an ability to solve systems of applications, including systems with three equations and three variables.
3. Demonstrate an understanding of quadratic functions, including graphing and equations.
4. Demonstrate an understanding of functions and relations, including one to one functions.
5. Demonstrate an understanding of logarithmic and exponential functions and their graphs.
6. Classify and graph ellipses, parabolas, and hyperbolas.
7. Demonstrate an understanding of sequences and series and their operations.

**Student Learning Outcomes:**

Solve quadratic equations by factoring, completing the square, and quadratic formula.  
Solve equations involving radicals.  
Recognize and graph equations of conic sections.  
Perform operations on functions algebraically.  
Solve an application involving exponential functions.

**Attendance and Absences:**

If you are 5 minutes late you will be marked absent. Do not make doctor, counseling, or any appointments during class time. . Leaving during lecture will be considered an unexcused absence. If you have to leave anytime during class, other than established break times, you must inform your instructor. After the third unexcused absence, you will be dropped from the class. In other cases, it is your responsibility to drop yourself before the withdrawal deadline. Disruptive and inconsiderate behavior will not be tolerated!

**Cheating and Plagiarism**

Dishonesty in the classroom is considered a very serious offense. Any form of cheating, turning in work which is not one's own (plagiarism), is grounds for disciplinary action. The consequences of these actions are severe and may include the possibility of expulsion.

**Silence pagers and cell phones.** Use of cell phones in the class room will not be permitted; you should not bring one into the classroom unless the ringer is turned OFF.

**Exams**

Purpose: To review the material introduced in class and to evaluate your understanding of the material covered in the course. There will be no make up exams given. Zeros will be given for all missed tests.

**Final Exam** (comprehensive)**Learning Resources**

1. Me: Office Hours; just walk-in and get help. Appointment hours; you must give at least one day advance notice
2. Tutorial services: Library, Vocational Education Building Room 1701
3. Study Guides: The bookstore has textbooks for sale

**Any student with a documented disability who may need educational accommodations should notify the instructor or DSPS office as soon as possible (DSPS, Room 2117, Health Sciences Building, (760) 355-6312)**

Note: I reserve the right to change this schedule with notification to students

**Schedule**

Week 1

Orientation

Systems of linear equations in two variables

Methods: Graphing, substitution, elimination (4.1, 4.2, 4.3)

Week 2

Systems of linear equations in three variables (4.5)

Applications (4.4)

Week 3

General functions, one-to-one functions (8.1-8.2)

Graphing functions, domain and range (8.3-8.4)

Applications

Week 4

**Exam I Tuesday**

Radicals (10.1-10.5)  
Radical equations (10.6)  
Week 5  
Introduction of complex numbers (10.7)  
Week 6  
Solving quadratic equations by factoring (11.1)  
Solving quadratic equations by completing the square (11.1)  
Week 7  
Solving quadratic equations by quadratic formula (11.2)  
Nonlinear equations reducible to quadratic forms (11.4)  
Quadratic functions (11.3)  
Week 8  
Quadratic functions continued (11.3)  
Applications (11.1-11.4)  
**Exam II -Thursday**  
Week 8  
Exponential functions (12.1)  
Logarithmic functions (12.2)  
Properties of logarithms (12.3)  
Week 9  
Exponential equations (12.4)  
Logarithmic equations (12.4)  
Week 10  
Applications of logarithmic functions (12.5)  
Applications of exponential functions (12.5)  
Week 11  
The circle (13.1)  
The ellipse (13.2)  
The hyperbola (13.3)  
Week 12  
Nonlinear systems of equations (13.4)  
Week 13  
**Exam III-Tuesday**  
Sequences (14.1)  
Series (14.3)  
Week 14  
Arithmetic sequence (14.2)  
Geometric sequence (14.3)  
Holiday-Thursday  
Week 15  
Review  
Week 16  
Final

Note: I reserve the right to change this schedule with notification to students