# MATH 150: COLLEGE ALGEBRA (4 units) – SPRING 2013 CRN: 20237 Time: 3:05 – 5:10 pm T/Th INSTRUCTOR: Jill Kitzmiller, Math Department Office Hours: M-Th 8:00 – 8:30 am and M/W 11:45 – 12:45 pm Office: 2768 Phone: (760) 355 - 6296 E-mail: jill.kitzmiller@imperial.edu

# **TEXT & MATERIALS**

<u>College Algebra: An Early Functions Approach</u>: Blitzer. A graphing calculator (TI 83 or 84 recommended) is also required.

# CATALOG COURSE DESCRIPTION

A continuation of the study of algebra. Attention will be paid to polynomial and rational functions, Exponential and Logarithmic functions, and Matrix Algebra. Additional topics include systems of equations, Linear Programming, and Analytic geometry.

#### PREREQUISITES

MATH 90 with a minimum grade of C or better

# STUDENT LEARNING OUTCOMES

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Graph rational functions.
- 2. Solve a linear programming problem.
- 3. Solve an application problem involving exponential growth or decay.
- 4. Perform vertical and horizontal transformations of a basic graph.

# **COURSE OBJECTIVES**

Upon satisfactory completion of the course, students will be able to:

- 1. Solve Linear & Quadratic equations.
- 2. Graph Linear & Quadratic equations and use them to model real-world situations.
- 3. Recognize and graph conic sections
- 4. Solve equations involving Polynomial & Rational Functions.
- 5. Graph and model with Polynomial & Rational Functions.
- 6. Understand the theory of Exponential and Logarithmic functions.
- 7. Operate on Matrices.
- 8. Solve and model with Linear Systems of equations using matrix algebra.
- 9. Use Linear Programming in common business and science applications.
- 10. Solve non-linear systems of equations.

# **CONTACTING INSTRUCTOR**

I will be available during office hours for personal discussion. I endeavor to listen to voice-mail and look at email each day when I am on campus. I DO NOT look at email on the weekends (Friday- Sunday) or on holidays. I do not respond to email regarding absences, unless it is long term. I do not discuss grades over email, this must be done in person.

#### PACE OF COURSE & TIPS FOR SUCCESS

This course moves rapidly coving the material equivalent to one year of math at the high school level, and meeting only twice per week. For every hour spent in class, you are expected to spend 2 -3 hours outside of class reading the book, doing homework, and studying the material. It is critical that you read ahead and ask questions. Avoid falling behind in the material, reading and homework. You cannot learn mathematics without doing the problems. If you fall behind it will be difficult to catch up. Stay organized, take good notes and read your notes after class. If you are having difficulty with the material, get help. You can get help from me during office hours or in the math tutoring center. Work with others outside of class, form a study group if possible. You are responsible for all material in assigned chapters and all material covered in lecture, even if you are absent, so find someone in class to make you copies of the notes & materials if you can not be in class.

# ACADEMIC ACCOMMODATION

Any student with a documented disability who may need academic accommodation should notify the instructor and the Disabled Student Services Programs and Services (DSP&S) office in room 2117 in the Health Science building as soon as possible. The DSP&S office phone number is (760) 355-6312.

#### **BEHAVIOR**

IVC School policy states that no food or drink is allowed in the classroom. Also no children are allowed in the classroom. You will be asked to leave the class for one or two class meetings if you exhibit behavior that prohibits or impedes any member of this class from pursuing any class assignment, objective or learning opportunity within the classroom. Please be courteous of others, try to be on time, turn off your cell phone or other electronic devices, and avoid talking during lectures. DO NOT TEXT. Texting during class is disruptive to your learning and students around you.

It is assumed that each student will do his/her own work. If a student is caught cheating on a test, that student will receive a "0" grade on that exam and the score will not be dropped. The student may also be referred to the college administration for disciplinary action. Examples of cheating include, but are not limited to, submitting someone else's work as your own and using unauthorized materials on the exams.

#### ATTENDANCE

IVC School policy states that students are expected to attend every session of class in which they are enrolled. It is the **student's responsibility** to add, drop, or withdraw from this class before the appropriate deadlines. You may be dropped by the instructor if you miss the first day of class or have more than 3 unexcused absences. If you decide to withdraw from this class, please let me know as a courtesy. If you fail to withdraw from this course before the deadline, you will be assigned a final grade in the course (even if you stop coming). Check the course catalogue for information on drop dates. **Regular class attendance is necessary for success in this course. You are responsible for all material covered in class during your absence.** 

#### **EVALUATION**

There will be five in class exams (100 points each) and one comprehensive final examination (100 points). Exams are closed book/closed note and each student must work independently. There are no make-up exams. Plan now to be in class on the date of the exams. Any missing exam grade will be recorded as a "0". Your lowest test score will be dropped (excluding the final). This can be done only one time.

There will also be assignments given in class which can be extensions of the material in class, group work or work from the book to be turned in. Homework will be assigned for each test and will be graded on completeness.

# GRADING

To receive a passing grade of "C" or better, you must have 490 points or more based on:

Assignments /Activities / homework	100 points
Exams	400 points
Final	100 points
Total	600 points

Breakdown: 540 & up = A, 480 - 539 = B, 420 - 479 = C, 360 - 419 = D, below 360 = F.

Attendance, class participation and a subjective instructor's interpretation of work may be used in assigning a final grade to borderline cases.

#### INCOMPLETE

To receive a final grade of incomplete, you must be passing the class and be unable to take the final exam.

# MATH 150 – COLLEGE ALGEBRA - TENTATIVE SCHEDULE – SPRING 2013

- SPRING 2015		
1/15	1/16	1/17
INTRODUCTION		1.4 – 1.5
1/22	1/23	1/24
5.1 – 5.2		2.6 / 5.5
1/29	1/30	1/31
5.6 / PROJECT		REVIEW
2/5	2/6	2/7
EXAM 1		1.9 /7.1
2/12	2/13	2/14
7.2 – 7.3		5.4 / REVIEW
2/19	2/20	2/21
EXAM 2		6.1 – 6.2
2/26	2/27	2/28 PROJECT
6.3		6.4 – 6.5
3/5	3/6	3/7
REVIEW		EXAM 3
3/12	3/13	3/14
1.2 – 1.3		1.6 - 1.7
3/19	3/20	3/21
3.1		3.2 – 3.3
3/26	3/27	3/28
3.4 /PROJECT		3.5 – 3.6
4/2	4/3	4/4
HOLIDAY	HOLIDAY	HOLIDAY
4/9	4/10	4/11
REVIEW		EXAM 4
4/16	4/17	4/18
4.1 - 4.2		4.3 – 4.4
4/23	4/24	4/25
4.5		REVIEW
4/30	5/1	5/2
EXAM 5		REVIEW
5/7	5/8	5/9
FINAL		INAL
	INTRODUCTION $1/22$ $5.1 - 5.2$ $1/29$ $5.6 / PROJECT$ $2/5$ EXAM 1 $2/12$ $7.2 - 7.3$ $2/19$ EXAM 2 $2/26$ $6.3$ $3/5$ REVIEW $3/12$ $1.2 - 1.3$ $3/19$ $3.1$ $3/26$ $3.4 / PROJECT$ $4/2$ HOLIDAY $4/9$ REVIEW $4/16$ $4.1 - 4.2$ $4/23$ $4.5$ $4/30$ EXAM 5 $5/7$	INTRODUCTION   1/22 1/23   5.1 - 5.2 1/30   1/29 1/30   5.6 / PROJECT 2/6   EXAM 1 2/10   2/12 2/13   7.2 - 7.3 2/20   EXAM 2 2/20   EXAM 2 2/27   6.3 3/6   REVIEW 3/13   3.2 - 1.3 3/13   1.2 - 1.3 3/13   3/19 3/20   3.1 3/20   3.1 4/2   4/2 4/3   HOLIDAY HOLIDAY   4/16 4/17   4.1 - 4.2 4   4/30 5/1   4/30 5/1   4/30 5/1   5/7 5/8