#### Imperial Valley College SCIENCE, MATH, AND ENGINEERING DIVISION MATH 150 COLLEGE ALGEBRA Fall 2013

CRN 10668: Monday and Wednesday from 3:05 pm to 5:10 pm in room 2722 Credit Hours: 4 Lec Instructor: Mr. Allyn Leon Office and Phone: 2760.2, (760) 355-6523 Email: allyn.leon@imperial.edu Office Hours: Monday/Tuesday/Friday from 1:30 pm to 2:30 pm Thursday from 10:00 am to 11:00 am Website: https://imperial.blackboard.com Prerequisites: MATH 091 with a grade of "C" or better, or appropriate placement..

#### \*\*\* Final exam is on Monday, December 2, 2013\*\*\* \*\*\*Last day to Add the class is Saturday, August 31, 2013\*\*\* \*\*\* Last day to withdraw from the class with a "W" is Saturday, November 9, 2013 \*\*\*

#### **REQUIRED TEXTBOOKS AND ELECTRONIC RESOURCES**

Textbook: College Algebra, 3E (corrected) by Stitz & Zeager.

- This is an opensource free textbook. You can download it from Blackboard (resources area) or by going to this link <u>http://stitz-zeager.com/szca07042013.pdf</u>.
- A calculator is recommended. This can be something like a TI-30 (which usually costs \$9-\$12), or you can go with a graphing calculator, like the TI-83 or TI-84; it really depends on what other math or science classes you plan on taking later on. If you plan on taking more advanced math classes after this one, a graphing calculator is the way to go.

#### **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.

#### COURSE OBJECTIVES

Through various activities and assessments, students will:

- 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 & 4. 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.

#### STUDENT LEARNING OUTCOMES

By the end of this course, you will be able to (1) graph rational functions, (2) solve a linear programming problem, (3) solve an application problem involving exponential growth or decay, and (4) perform vertical and horizontal transformations of a basic graph. These outcomes will be assessed through selected exercises on exams throughout the semester.

### **COURSE COMPONENTS**

HOMEWORK

• There will be **optional homework sets** assigned from every section that we cover. A list of exercises for those from the book will be available in Blackboard.

QUIZZES

There will be twenty-one (21) quizzes during the semester. These will take place as noted on our tentative schedule and will contain 2 to 5 questions over material that has been covered during the week. The lowest quiz score will be dropped, so only twenty (20) will count towards your grade. There will be no make-up quizzes. If you miss a quiz, the quiz will be recorded as a zero.

TESTS

- There will be five (5) tests during the semester. Tests 1-4 will cover 2 chapters each. The tests will be worth 100 points each. Test 5 is the final exam, worth 300 points.
- <u>There will be no make-up exams</u>. If you miss an exam, the test will be recorded as a zero, and <u>the final exam percentage</u> will be used to replace that score at the end of the semester.

EXTRA CREDIT

• There is **NO** extra credit in this class.

CHECKING GRADES

• Your grades will be available in Blackboard. That should be the first place you look when you want to know your grades.

GRADING POLICY

Your grade will be comprised of the following items:

20 Quizzes @ 15 points each (21 taken, 1 dropped)	300 points	~30%
4 tests @ 100 points each	400 points	~45%
1 Final Exam @ 300 points	300 points	~25%
Total	1000 points	100%

Your final grade will be based on the following points and percentages:

90% to 100%	900-1000 points	А
80% to 89%	800-899 points	В
70% to 79%	700-799 points	С
60% to 69%	600-699 points	D
Below 60%	Below 600 points	F

## IVC POLICIES

- Under IVC policy, students are expected to attend every session of class in which they are enrolled. If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. I will not drop you from the course. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.
- Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Room 2117, in the Health Sciences Building. Their phone number is (760) 355-6312.
- Student Responsibilities and Expectations: You are expected to attend class on a regular basis. Make sure you come to every class meeting. You will find it very hard to succeed in this class if you do not come to class regularly. Make sure that you read ahead in the textbook and that you work out the problems that I have assigned. Part of your work will be done in groups. You cannot learn mathematics without doing the problems. Math is like playing the piano; the more you practice, the better you get (as long as you're practicing correctly).

# **TENTATIVE SCHEDULE**

Date	Description/Readings/Tests	Date	Description/Readings/Tests
08/19	Introduction, <b>Q1</b>	10/14	Sections 6.3, 6.4, , <b>Q13</b>
08/21	Sections 1.1, 1.2, 1.3, <b>Q2</b>	10/16	Section 6.5, <b>Q14</b>
08/26	Sections 1.4, 1.5, 1.6, <b>Q3</b>	10/21	Review
08/28	Sections 1.7, 2.1, <b>Q4</b>	10/23	Test 3
09/02	Labor Day	10/28	Sections 7.1, 7.2, <b>Q15</b>
09/04	Sections 2.2, 2.3, <b>Q5</b>	10/30	Sections 7.3, 7.4, <b>Q16</b>
09/09	Section 2.4, 2.5, <b>Q6</b>	11/04	Sections 7.5, 8.1, <b>Q17</b>
09/11	Review	11/06	Sections 8.2, 8.3, <b>Q18</b>
09/16	Test 1	11/11	Veteran's Day
09/18	Sections 3.1, 3.2, <b>Q7</b>	11/13	Sections 8.4, 8.5, <b>Q19</b>
09/23	Sections 3.3, 3.4, <b>Q8</b>	11/18	Sections 8.7, <b>Q20</b>
09/25	Sections 4.1, 4.2, <b>Q9</b>	11/20	Review
09/30	Section 4.3, <b>Q10</b>	11/25	Test 4
10/02	Review	11/27	Sections 9.1, 9.2, <b>Q21</b>
10/07	Test 2	12/02	Review
10/09	Sections 5.1, 5.2, 5.3, <b>Q11</b>	12/04	Test 5
10/11	Sections 6.1, 6.2, <b>Q12</b>		