Imperial Valley College<br>SCIENCE, MATH, AND ENGINEERING DIVISION<br>MATH 091<br>INTERMEDIATE ALGEBRA<br>Fall 2012

Class Location/Dates/Times: Monday - Thursday from 10:15 am to 11:25 am in room 2723
CRN: 10417
Credit Hours: 5 Lec
Instructor: Mr. Allyn Leon
Office and Phone: 2760.2, (760) 355-6523
Email: allyn.leon@imperial.edu
Website: http://www.imperial.edu/allyn.leon, http://imperial.blackboard.com, http://www.mathxl.com
Prerequisites: MATH 081 with a grade of " C " or better, or appropriate placement.. Office Hours:

Monday from 1:00 pm to $3: 30 \mathrm{pm}$
Tuesday and Wednesday from 11:30 pm to 12:00 pm
Thursday from 9:40 am to 10:10 am
*** Final exam is on Tuesday and Wednesday, December 4 and 5, 2012 ***
*** Last day to withdraw from the class with a "W" is Saturday, November 10, 2012

## REQUIRED TEXTBOOKS AND ELECTRONIC RESOURCES

Textbook: Introductory and Intermediate Algebra, 4E by Blitzer (Custom book), Pearson Publisher.
You will have two options for the textbook.
Option 1: Purchase the textbook new (bundled with MathXL)
Option 2: You may choose to not buy the physical textbook, and just purchase MathXL access. You will have access to the textbook pages through the homework...
Some people prefer the second option because it is potentially less expensive. However, many people do prefer having a physical copy of the book. You may choose either of the above options for this class, as long as you have some sort of access to MathXL, as this is how you will complete your homework.

- When you register in MathXL, you will be asked to enroll in a course. Use the Course ID: XLOZ-W1P2-701Z-5T52 (this includes zeros, and not o's).
- A basic calculator, like a TI-30 (costs around $\$ 10$ ) is recommended.


## COURSE DESCRIPTION

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

## COURSE OBJECTIVES

Through various activities and assessments, students will:

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 and understanding of quadratic functions, including graphing and equations.
4. Demonstrate and understanding of functions and relations, including one to one functions.
5. Demonstrate and 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

By the end of this course, you will be able to (1) solve quadratic equations by factoring, completing the square, and quadratic formula, (2) solve equations involving radicals, (3) recognize and graph equations of conic sections, (4) solve three by three linear systems by elimination and/or substitution, and (5) solve an application involving exponential functions. These outcomes will be assessed through selected exercises on exams throughout the semester.

## COURSE COMPONENTS

ASSIGNMENTS AND LATE WORK POLICY

- There will be 40 homework sets assigned from every section that we cover, plus 4 practice tests. These need to be done in MathXL (remember that MathXL is a required component of this course).


## QUIZZES

- There will be eleven (11) 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.
TESTS
- There will be six (6) tests during the semester. Tests $1-4$ will cover 2 chapters each. The tests will be worth 100 points each. Tests 5 and 6 are the final exam, split into 2 parts/ days.
- There will be no make-up exams. If you miss an exam, the test will be recorded as a zero, and the final exam percentage will be used to replace that score at the end of the semester.

GRADING POLICY
Your grade will be comprised of the following items:

| 40 HW Assignments @ 5 points each | 200 points | $\sim 20 \%$ |
| :--- | ---: | ---: |
| 10 Quizzes @ 20 points each (11 taken, 1 dropped) | 200 points | $\sim 20 \%$ |
| 6 tests @ 100 points each | 600 points | $\sim 60 \%$ |
| Total | 1000 points | $100 \%$ |

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

| $90 \%$ to $100 \%$ | $900-1000$ points | A |
| ---: | ---: | :---: |
| $80 \%$ to $89 \%$ | $800-899$ points | B |
| $70 \%$ to $79 \%$ | $700-799$ points | C |
| $60 \%$ 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).

| WEEK | DAY | DATE | SCHEDULE |
| :---: | :---: | :---: | :---: |
| 1 | M | 8/20 | Introduction |
|  | Tu | 8/21 | 4.1 |
|  | W | 8/22 | 4.2 |
|  | Th | 8/23 | 4.3, Q1 |
| 2 | M | 8/27 | 4.4 |
|  | Tu | 8/28 | 4.4 |
|  | W | 8/29 | 4.5 |
|  | Th | 8/30 | 8.1, Q2 |
| 3 | M | 9/3 | NO CLASS |
|  | Tu | 9/4 | 8.2 |
|  | W | 9/5 | 8.3 |
|  | Th | 9/6 | 8.4, Q3 |
| 4 | M | 9/10 | Test 1 Review |
|  | Tu | 9/11 | Test 1 |
|  | W | 9/12 | Test 1 Recap |
|  | Th | 9/13 | 9.1 |
| 5 | M | 9/17 | 9.2 |
|  | Tu | 9/18 | 9.3 |
|  | W | 9/19 | 10.1 |
|  | Th | 9/20 | 10.2, Q4 |
| 6 | M | 9/24 | 10.3 |
|  | Tu | 9/25 | 10.4 |
|  | W | 9/26 | 10.5 |
|  | Th | 9/27 | 10.6, Q5 |
| 7 | M | 10/1 | 10.7 |
|  | Tu | 10/2 | Test 2 Review |
|  | W | 10/3 | Test 2 |
|  | Th | 10/4 | Test 2 Recap |
| 8 | M | 10/8 | 11.1 |
|  | Tu | 10/9 | 11.2 |
|  | W | 10/10 | 11.3 |
|  | Th | 10/11 | 11.3, Q6 |


| WEEK | DAY | DATE | SCHEDULE |
| :---: | :---: | :---: | :---: |
| 9 | M | 10/15 | 11.4 |
|  | Tu | 10/16 | 11.5 |
|  | W | 10/17 | 12.1 |
|  | Th | 10/18 | 12.2, Q7 |
| 10 | M | 10/22 | 12.3 |
|  | Tu | 10/23 | 12.4 |
|  | W | 10/24 | 12.5 |
|  | Th | 10/25 | Test 3 Review |
| 11 | M | 10/29 | Test 3 |
|  | Tu | 10/30 | Test 3 Recap |
|  | W | 10/31 | 13.1 |
|  | Th | 11/1 | 13.2, Q8 |
| 12 | M | 11/5 | 13.3 |
|  | Tu | 11/6 | 13.4 |
|  | W | 11/7 | 13.4 |
|  | Th | 11/8 | 13.5, Q9 |
| 13 | M | 11/12 | NO CLASS |
|  | Tu | 11/13 | 13.5 |
|  | W | 11/14 | 14.1 |
|  | Th | 11/15 | 14.2, Q10 |
| 14 | M | 11/19 | 14.2 |
|  | Tu | 11/20 | 14.3 |
|  | W | 11/21 | 14.3, Q11 |
|  | Th | 11/22 | NO CLASS |
| 15 | M | 11/26 | Test 4 Review |
|  | Tu | 11/27 | Test 4 |
|  | W | 11/28 | Test 4 Recap |
|  | Th | 11/29 | Final Review |
| 16 | M | 12/3 | Final Review |
|  | Tu | 12/4 | Test 5 |
|  | W | 12/5 | Test 6 |
|  | Th | 12/6 | Final Recap |

