

**Imperial Valley College**  
SCIENCE, MATH, AND ENGINEERING DIVISION  
**MATH 091**  
**INTERMEDIATE ALGEBRA**  
**Summer 2013**

**Class Location/Dates/Times:** Monday - Thursday from 11:30 am to 3:15 pm in room 2723  
**CRN:** 30125

**Credit Hours:** 5 Lec

**Instructor:** Mr. Allyn Leon

**Office and Phone:** 2760.2, (760) 355-6523

**Email:** [allyn.leon@imperial.edu](mailto:allyn.leon@imperial.edu)

**Website:** <https://imperial.blackboard.com/> and <http://www.mathxl.com>

**Prerequisites:** MATH 081 with a grade of "C" or better, or appropriate placement..

**\*\*\* Final exam is on Thursday, August 1, 2013\*\*\***

**\*\*\*Last day to Add the class is Wednesday, June 26, 2013\*\*\***

**\*\*\* Last day to withdraw from the class with a "W" is Tuesday, July 23, 2013 \*\*\***

**REQUIRED TEXTBOOKS AND ELECTRONIC RESOURCES**

Textbook: Introductory and Intermediate Algebra, 4E by Blitzer, Pearson Publisher.

You will have three 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...

**Option 3:** You may buy the textbook used with or without MathXL.

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 any of the above options for this class, MathXL is optional.

- When you register in MathXL, you will be asked to enroll in a course. Use the Course ID: **XL18-X1N0-401Z-3T52** (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, logarithmic 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 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**

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**

### *HOMEWORK*

- There will be **optional homework sets** assigned from every section that we cover available in MathXL (remember that MathXL is optional). I will also have a list of exercises for those who wish to do the work out of the book. The homework list is at the end of this syllabus.

### *QUIZZES*

- There will be seventeen (17) quizzes during the semester. These will take place as noted on our tentative schedule and will contain around 5 questions over material that has been covered during the week. The two (2) lowest quiz scores will be dropped, so only fifteen (15) 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 1-3 will cover 2 chapters each. The tests will be worth 100 points each. Test 4 is a take-home practice Final, and is also worth 100 points. Test 5 is the final exam, worth 300 points.
- **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.

### *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:

15 Quizzes @ 20 points each (17 taken, 2 dropped)	300 points	~30%
4 tests @ 100 points each	400 points	~40%
1 Final Exam @ 300 points	300 points	~30%
<i>Total</i>	<i>1000 points</i>	<i>100%</i>

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).

## **TENTATIVE SCHEDULE**

<b>Date</b>	<b>Description/Readings/Tests</b>
06/24	Introduction and Sections 4.1, 4.2, <b>Q1</b>
06/25	Sections 4.3, 4.4, <b>Q2</b>
06/26	Sections 4.5, 8.1, 8.2, <b>Q3</b>
06/27	Section 8.3, 8.4, <b>Q4</b>
07/01	Review and <b>Test 1</b>
07/02	Sections 10.1, 10.2, <b>Q5</b>
07/03	Section 10.3, 10.4, <b>Q6</b>
07/04	<b>Independence Day</b>
07/08	Sections 10.5, 10.6, <b>Q7</b>
07/09	Sections 10.7, 11.1, <b>Q8</b>
07/11	Sections 11.2, 11.3, <b>Q9</b>
07/15	Sections 11.4, 11.5, <b>Q10</b>
07/16	Review and <b>Test 2</b>
07/17	Sections 12.1, 12.2, <b>Q11</b>
07/18	Sections 12.3, 12.4, <b>Q12</b>
07/22	Sections 12.5, 13.1, <b>Q13</b>
07/23	Sections 13.2, 13.3, <b>Q14</b>
07/24	Sections 13.4, 13.5, <b>Q15</b>
07/25	Review and <b>Test 3</b>
07/29	Sections 14.1, 14.2, <b>Q16</b>
07/30	Section 14.3, <b>Q17</b>
07/31	Review for Test 5
08/01	<b>Test 5 (final exam)</b>

## **HOMEWORK EXERCISE LIST**

<b>Section</b>	<b>Exercises</b>
4.1	1, 11, 15, 23, 25, 29, 31, 33, 35, 43, 47
4.2	1, 3, 5, 9, 13, 15, 21, 25, 27
4.3	1, 3, 5, 7, 9, 11, 19, 21, 29, 31, 33, 37, 41, 63, 65
4.4	1, 3, 11, 17, 21, 23, 29, 31, 35, 37, 43, 45
4.5	1, 3, 5, 7, 9, 11, 13, 15, 17, 19
8.1	1, 3, 9, 11, 13, 17
8.2	1, 3, 7, 15, 17, 21, 25, 27, 29, 33, 37, 39, 41
8.3	1, 3, 5, 11, 17, 33, 41, 45
8.4	1, 3, 5, 7, 11, 15, 17, 19, 23, 25, 27, 29, 33, 35, 37, 39, 41
10.1	1, 5, 9, 13, 21, 23, 27, 31, 39, 47, 49, 51, 53, 55, 61, 65, 71, 73, 81, 85
10.2	1, 5, 9, 13, 15, 19, 21, 23, 25, 27, 33, 39, 41, 43, 45, 47, 49, 55, 57, 59, 61, 65, 67, 69, 75, 79, 81, 83, 85, 87, 89, 91
10.3	1, 3, 5, 11, 15, 21, 23, 25, 27, 29, 31, 39, 41, 47, 53, 57, 61, 67, 71, 73, 75
10.4	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 29, 31, 33, 35, 37, 39, 45, 47, 49, 51, 59, 67, 69
10.5	1, 5, 7, 11, 19, 23, 25, 27, 29, 35, 39, 41, 43, 45, 51, 57, 61, 65, 75, 77, 79, 81, 83, 87, 105
10.6	1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41
10.7	1, 7, 13, 17, 21, 25, 29, 33, 37, 43, 47, 53, 63, 67, 71, 75, 85, 89, 93, 97, 101, 105, 109
11.1	1, 3, 5, 11, 17, 19, 35, 37, 39, 41, 43, 47
11.2	1, 3, 9, 11, 13, 17, 31, 33, 39, 43, 49
11.3	9, 11, 13, 15, 17, 19, 23, 27, 31, 33, 39, 41
11.4	1, 3, 5, 7, 13
11.5	1, 3, 5, 7, 9, 29, 41, 43, 49, 51, 53, 55, 65, 71
12.1	5, 7, 11, 13, 39, 41
12.2	3, 5, 7, 9, 11, 13, 15, 19, 21, 23, 25, 27, 29, 31, 33, 35, 39, 41, 55, 57, 59, 61, 63, 65, 67, 69
12.3	5, 7, 11, 13, 15, 17, 23, 25, 27, 31, 33, 35, 43, 45, 47, 49, 51, 53, 57, 59, 61, 63, 65, 67
12.4	1, 5, 9, 13, 19, 25, 33, 41, 51, 57, 63, 81, 89, 101, 113
12.5	1, 5, 7, 15, 17, 19, 21
13.1	1, 3, 5, 9, 11, 13, 15, 17, 19, 21, 23, 25
13.2	1, 3, 5, 7, 9, 11, 21, 23, 25, 27, 29
13.3	1, 3, 5, 7, 9, 11, 13, 15, 17
13.4	1, 3, 5, 9, 15, 19, 23, 55, 57, 59, 61
13.5	1, 3, 7, 9, 19, 21
14.1	1, 3, 9, 11, 13, 17, 21, 31, 41, 43
14.2	1, 3, 7, 9, 35, 37, 45
14.3	1, 3, 9, 11, 13