# IMPERIAL VALLEY COLLEGE 

MATH 081

Intermediate Algebra<br>Course Syllabus

## Course Syllabus

| Course Title: | Introductory Algebra |
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| Course Schedule/ Time: | Thursday - 5:15 p.m. to 9:30 p.m. |
| Course Location: | Main Campus, 300 Building Room 313B |
| Book: | Introductory \& Intermediate Algebra Custom Edition for Imperial Valley College <br> Robert Blitzer ISBN 978-1-256-83889-0 |
| Electronic Resources: | MathXL MyMathLab can be purchased separately. |
| Instructors Name: | Carlos Canez |
| Telephone: | Please Leave a Message <br> Cell: 760-622-6589 |
| E-Mail Address | carlos.canez@imperial.edu |
| Calculator | REQUIRED! Please bring a scientific non-graphing calculator. |

## Math 81

Chapter 1 (optional/review)
Chapter 2 (Sec. 1-7)
Chapter 3 (Sec. 1-5)
Chapter 4 (Sec. 1-4)
Chapter 5 (Sec. 1-7)
Chapter 6 (Sec. 1-6)
Chapter 7 (Sec. 1-7)
Chapter 8 (Sec. 1)
Chapter 9 (Sec. 1-4)
Chapter 10 (Sec. 1-2 ...introductory instruction/ light version only)

## Institutional Student Learning Outcomes

Imperial Valley College's students, faculty, staff, and administrators will work toward and assess student learning outcomes in the following areas:

- Communication Skills
- Critical Thinking Skills
- Personal Responsibility
- Information Literacy
- Global Awareness


## Student Learning Outcomes for Math 81

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

1. Solve linear equations in one variable. (ILO2)
2. Factor ploynomial expressions using a variety of methods and solve polynomial equations. (ILO2)
3. Graph linear equations and find values related to linear graphs. (ILO2)
4. Solve application problems appropriate to beginning algebra. (ILO2)

## MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C"

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

1. demonstrate skills in solving first degree equations.
2. demonstrate the ability to solve many problems in diverse areas, in a step-bystep manner, when dealing with applications.
3. develop manipulation skills when operating polynomials.
4. demonstrate the various types of factoring and be cognizant of the factoring process.
5. demonstrate an understanding of skills in operations with and simplifications of rational expressions.
6. demonstrate a visual understanding of the Cartesian Coordinate System and linear graphs.
7. demonstrate the ability to solve linear systems of equations both algebraically and graphically.
8. demonstrate the ability to solve linear inequalities algebraically and be able to present the solutions graphically.

## CORE CONTENT TO BE COVERED IN ALL SECTIONS:

|  | APPROX. <br> CORE CONTENT |
| :--- | :--- |
|  | OF <br> COURSE |
| Solving equations <br> A. Solving equations in one variable <br> B. Translating sentences into equations <br> C. Applications |  |
| Exponents and Radicals <br> A. Properties of exponents <br> B. Rational exponents, zero and negative exponents <br> C. Operations on radical expressions | $10.00 \%$ |
| Polynomials |  |
| A. Addition and subtraction of polynomials |  |
| B. Multiplication of polynomials |  |
| C. Division of polynomials including long |  |
| division and synthetic division | $10.00 \%$ |
| Factoring <br> A. Monomial factors <br> B. Factoring trinomials <br> C. Special factoring (including cubic) <br> D. Solving equations by factoring <br> E. Applications |  |
| Rational Expressions |  |
| A. Simplify rational expressions |  |
| B. Operations on rational expressions | $15.00 \%$ |
| C. Complex fractions |  |
| D. Ratio and proportion |  |
| E. Rational equations |  |
| F. Applications |  |
| Graphs and linear equations |  |
| A. The Cartesian coordinate system | $100 \%$ |
| B. Graphs of lines |  |
| C. Intercepts and slopes of lines |  |
| D. Equations of lines |  |
| E. Functions |  |
| F. Applications | $15.00 \%$ |
| Systems of linear equations in two variables |  |
| A. Solving systems of linear equations by graphing |  |
| B. Soving systems of linear equations by the substitution |  |
| method |  |
| C. Solving systems of linear equations by the addition |  |
| method |  |
| D. Application problems in two variables |  |
| Inequalities |  |
| A. Sets and notation |  |
| B. Addition and multiplication properties of inequalities |  |
| C. Graphing linear inequalities |  |
| D. Absolute value equations and inequalities. |  |
| E. Applications |  |
| TOTAL |  |

## Course Description

This one semester course is equivalent to a first year algebra course offered in a full year of high school. Topics covered include the real number system, polynomials, rational expressions, exponential and radical forms, linear and quadratic equations, relations, functions and graphs, systems of equations and exponential functions.

## Grades

## How Percentages Equate to Grades

90-100 A
80-89 B
70-79 C
60-69 D
00-59 F

## Grade Make-up

Test 50\%
Quizzes/ Homework .... 25\%
Final ........................ 25\%

## Policies and Procedures

## Academic Honesty

Academic honesty is highly valued at IVC. You must always submit work that represents your original thoughts and steps. Please see the IVC catalog for more information about academic honesty, including consequences of academic dishonesty.

## Late Assignments

No late assignments will be accepted.

## Missed Tests

If you miss a test, the percentage worth of that test will be added to your final test. For example if you miss a test that is worth 15 percent and the final is worth 25 percent your final is now 40 percent of your grade.

## Disabled Student Program

Services are provided on an individual basis and may include reader services, note taking, tutoring, counseling, sign language, interpreting, priority registration, learning disability assessment and adapted computer instruction. If there are any modifications you may need, please let me know as soon as possible or call the DSP\&S at 355-6312 or go to building 2100.

## Attendance

Attendance is mandatory. If you miss more than the allowed two classes I may drop you from the class. Please do not assume that I will drop you from the class if you stop attending, it is your responsibility to drop the class.

## Drop date

The last day to drop with a "W" is November 10.

## Learning resources

- Please ask me.
- Tutoring services
- Math lab
- Study Guide
- MathXL

Two (2) hours of independent work done out of class per each hour of lecture or class work, or 3 hours lab, practicum, or the equivalent per unit is expected.

## Final Exam

Final exam for Math 81 will be held on Thursday, December $6^{\text {th }}$, on the main campus from 5:15PM-7:15PM. If you need to take the final exam at any other time than the scheduled, you need to complete and submit a Student Petition by Friday, November 2, 2012. The final exam will be comprehensive and students will need to bring the following:

