Basic Course Information

Semester	**Spring 2014**	Instructor Name	**Ruben Varela**
Course Title & #	**Intermediate Algebra**	Email	**ruben.varela@imperial.edu**
CRN #	**20134**	Webpage (optional)	
Room	**2722/2700**	Office	**Room 809**
Class Dates	**Jan 22, 27, 29** **Feb 3, 5, 10, 12, 19, 24, 26** **Mar 3, 5, 10, 12, 17, 19, 24, 26, 31** **Apr 2, 7, 9, 14, 16, 28, 30** **May 5, 7, 12, 14**	Office Hours	**N/A**
Class Days	**Monday and Wednesday**	Office Phone #	**(760) 355 6155**
Class Times Units	**6:30 p.m. – 9:00 p.m.** **5.0**	Office contact if student will be out or emergency	**Science/Math Engineering**

Course Description

A further study of the concepts of algebra. Topics covered include linear and quadratic equations, relations, functions and graphs, systems of equations, logarithms and exponential functions, conic sections, and sequences and series. (Nontransferable, AA/AS degree only)

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) 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) Perform operations on functions algebraically
5) Solve an application involving exponential functions

Course Objectives

The student will demonstrate the followings:
1) Demonstrate and understanding of radical expressions and equations.
2) 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 graphs ellipses, parabolas, and hyperbolas.
7) Demonstrate an understanding of sequences and series and their operations

Textbooks & Other Resources or Links

Introductory and Intermediate Algebra for College Students/Robert Blitzer. 4th Edition/Pearson

ISBN 10: 0-321-75894-3
ISBN 13: 978-0-321-75894-1

Course Requirements and Instructional Methods

1) Chapter lectures using classroom technology
2) Homework after every class session
3) Group activities after every chapter
4) At times individual participations for extrapoints
5) Late assignments is not accepted.
6) Bring your textbook to class every-session.
7) Missed assignments and exams are recorded as zeros.
8) It is your responsibility to drop before the **W deadline**: April 12, 2014. **Important dates**: Last day to add: February 1, 2014. **Census Date**: February 3, 2014
9) **Holidays**: February 17, 2014
                    April 21 – 25, 2014

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time <u>and </u>two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

GRADING SCALE

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

00 – 59 = F

GRADE DISTRIBUTION

Exam one   = 15%

Exam two   = 15%
Exam three = 15%

Exam four   = 15%

Final exam   = 25% (Mandatory)

Homework   = 15%

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor. **Consider:** specifics for your class/program
- Food and Drink are prohibited in all classrooms.   Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

   Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Additional Help – Discretionary Section and Language

- Blackboard support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

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 Building 2100, telephone 760-355-6313 if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at
http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests

Week # 1
January 21 - 24
	Chapter 8. Basics of functions
	  1. Introduction to functions
	  2. Graphs of functions
		Pages 585-608

Week # 2
January 27 - 31
	Chapter 8. Basics of functions
	  3. The algebra of functions
	  4. Composite and inverse functions
		Pages 609-633

Week # 3
February 3 - 7
	Chapter 9. Inequalities and problem solving
	  1 Reviewing linear inequalities and using inequalities in business application
	  2 Compound inequalities
		Pages 642-662

Week # 4
February 10 - 13
	Chapter 9. Inequalities and problem solving
	  3 Equations and inequalities involving absolute value
	  4 Linear inequalities in two variables
		Pages 663-685

Week # 5 February 17 - 21	Activities in class and Exam # 1 of Chapters 8 and 9	

Week # 6
February 24 - 28
	Chapter 10. Radicals, radical functions, and rational exponents
	  1. Radical expressions and functions
	  2. Rational exponents
		Pages 692-714

Week # 7
March 3 - 7
	Chapter 10. Radicals, radical functions, and rational exponents
	  3. Multiplying and simplifying radical expressions
	  4. Adding, subtracting, and dividing radical expressions
		Pages 715-731

Week # 8
March 10 - 14
	Chapter 10. Radicals, radical functions, and rational exponents
	  5. Multiplying with more than one term and rationalizing denominators
	  6. Radical equations
	  7. Complex numbers
		Pages 732-761

Week # 9 March 17 - 21	Activities in class and Exam # 2 of Chapter 10	
Week # 10 March 24 - 28	Chapter 11. Quadratic equations and functions 1. The square root property and completing the square; distance and midpoint formulas 2. The quadratic formula 3. Quadratic functions and their graphs 4. Equations quadratic in form 5. Polynomial and Rational Inequalities	Pages 772-844
Week # 11 March 31- April 4	Chapter 12. Exponential and Logarithmic Functions 1. Exponential function 2. Logarithmic function 3. Properties of logarithms 4. Exponential and logarithmic equations 5. Exponential growth and decay; modeling data	Pages 856-920
Week # 12 April 7 - 11	Activities in class and Exam # 3 of Chapters 11 and 12	
Week # 13 April 14 - 18	Chapter 13. Conic sections and systems of nonlinear equations 1. The Circle 2. The Ellipse 3. The Hyperbola 4. The Parabola; Identifying conic sections 5. Systems of nonlinear equations in two variables	Pages 932-983
Week # 14 April 28 - May 2	Chapter 14. Sequences, series, and the binomial theorem 1. Sequences and summation notation 2. Arithmetic sequences 3. Geometric sequences 4. Exam # 4. Chapters 13 and 14	Pages 992-1035
Week # 15 May 5 - 9	Activities in class and Exam # 4 of Chapters 13 and 14	
Week # 16 May 12 - 16	Final Exam (Mandatory) Chapters 8-14	