## MATH 081- Beginning Algebra

## Fall 2015

Session: M\&W 6:30-8:35 p.m. code: 10095 bld:2700, Room:2723
Instructor :PorfirioHernandez - . Phone:(760)234-0611 email:pohernan@yahoo.com

# IT IS YOUR RESPONSIBILITY TO DROP THE CLASS, IF YOU CAN'T ATTEND! LAST DAY TO DROP ANYCLASS IS NOV 07 TH. (WITH A "W")!OTHERWISE YOUR GRADE WILL BE F. 

## Texthook:

## Book:Introductory \&intermediate Algebra for college students. By:Pearson 4th edition.

## 1.-COURSE/CATALOG DESCRIPTION:

An introduction to the concepts of Algebra.Topics covered include solving equations, polynomials, factoring, rational expressions, graphs and linear equations system of linear equations, and inequalities( Nontransferable, nondegree applicable)

## PREREQUISITES: if any

MATH 071 with a minimum grade of C or better or MATH 070 with a minimum grade of C or better or
Appropriate Placement

## GRADING CRITERIA:

## Letter grade only:

| Grading Scale |  |
| :--- | :--- |
| A | $100-90$ |
| B | $89-80$ |
| C | $79-70$ |
| D | $69-60$ |
| F | $59-$ under. |

Grade Distribution
Homework/quizzes 15\% 15\%
Tests(4tests@15 each) 60\%
Final Exam 25\%

## Calculators

You will be encouraged to use a calculator, as many of the problems will require them. Problems that require a calculator will be on the tests, but I will not provide you with calculators. NO Cell phones, OR iPod type devices will be allowed in this course

## Homowork and Qulzzes (15\%)

Late homework will not be accepted. The homework will be base on the book. Also I'm going to give you a practice test before any test or quiz and it will be solved in the class, including the final exam.

## Tests (60\%)

There will be 4 tests, each worth $15 \%$.only the final exam will be multiple choice.There will be no makeup exams given. Zeros will be given for all missed tests. The tests will be created by IVC. Each test will last no more than 55 minutes each.

## Final Exam 25\%

The Final Exam will be multiple choice. It will be comprehensive and will be created by the IVC Math Department.
Final exam will be on May $12^{\text {th }}$.
You will need to bring the following items for the Final Exam:

- Several \#2 pencils and erasers
- No calculators
- NO cell phones or other electronic devices will be allowed (i.e. NO iPods, palm pilots, cell phones...)


## Tutoring

Tutoring is available through www.mathxl.com and through the Imperial Valley College Math Lab in the 2500 Building and can be reached at $355-6190$ or 355-6187. The Math Lab is open: Mon (8am9pm), Tues (8am-9pm), Wed (8am-9pm), Thurs (8am-9pm), Fri (8am-5pm), and Sat (8am-1pm).

## STUDENT LEARNING OUTCOMES:

Upon course completation, the successful student will acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
1.-Solve linear equations in one variable(ILO2)
2.-Factor polynomial 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 applications problems appropiated 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 skill in solving first degree equations.
2.-demonstrate the ability to solve many problems in diverse areas in step by step manner, when dealing with applications.
3.-develop manipulation skills when operating polynomials.
4.-demonstrate the various types of factoring.
5.-demonstrate an understanding of skills in operations with and simplifications of rational expressions.
6.-demonstrate a visual understanding of the Cartesian coodinate 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.

## Classroom Expectations

- TURN OFF YOUR CELLULAR PHONES (or leave them at home). Courtesy please. IF IT RINGS, YOU WILL BE ASKED TO LEAVE AND IT WILL BE MARKED AS AN ABSENCE. YOU WILL NOT BE ALLOWED TO STAY IN CLASS.
- Be Prompt!!! Class starts at 6:30 p.m., not 6:35 p.m. You will NOT be allowed to come in if class has already started. DO NOT come in late or leave early from class (it disrupts the flow of the class). If you do, you will be marked as an absence.
- Exchange phone numbers (ONLY if you feel comfortable - you DON'T have to) with classmates to assure getting homework and test information accurately. It's hard to do it alone.
- Cheating will result in an automatic " F " grade in the class (Cheating $=$ " F " for the semester)
- Food or Drink is NOT allowed in class!
- Any student who needs special modifications, please see the teacher or call: DSP\&S at 355-6312
- After 2 absences, you will be dropped from class (It is still your responsibility to drop the class). You will find it is hard to recover if you miss a few classes.
- Avoid any uncomfortable situation such as bringing your children to class (IVC policy), making unfair remarks or laughing at other people's questions/remarks.
- Avoid talking or laughing during the class.you will be asked to leave the class, the second time that you interrupt the class laughing or talking you will be dropped from the class.
CORE CONTENT TO BE COVERED IN ALL SECTIONS,

| CORE CONTENT | APPROX.\% OF COURSE |
| :--- | :---: |
| 1.-Linear equations and |  |
| inequalities in one variable. |  |
| A) The addition property of |  |
| equality | $15.00 \%$ |
| B) The multiplication property of |  |
| equality |  |
| C) Solving linear equations |  |

D) Formulas and Percents
E) An introduction to problem solving
F) Problem solving in Geometry
G)Solving Linear Inequalities
2.- Linear Equations in Two

Variables
A) Graphing Linear equations in two variables.
15.00\%
B) Graphing linear equations using intercepts.
C) Slope
D) Graphing using the slope..
3.- Systems of linear equations
A). Solving systems of linear equations by graphing.
B) Solving Systems of linear equations by substitution method.
C) Solving System of linear equations by the addition method.
D) Problem solving using systems of equations.
4.- Exponents and Polynomials
A) Adding and subtracting polynomials.
15.00\%
B) Multiplying Polynomials.
C) Special Products.
D) Polynomials in several variables.
E) Dividing polynomials using long and synthetic division.
F) Negative exponents and Scientific Notation.
5.-Factoring polynomials.
A) The Greatest common factor and factoring by Grouping.
B) Factoring Trinomials Whose leading coefficient is one.
C) Factoring trinomials Whose
leading coefficient is not one.
D) Factoring Special forms.
E) General Factoring Strategy.
F) Solving Quadratic equations by Factoring.
6.-Rational Expressions.
A) Rational Expressions and their Simplification.
B)Multiplying and dividing rational expressions.
C) Adding and Subtracting rational expressions with same 20.00\% denominators.
D) Adding and Subtracting rational expressions with unlike denominator.
E) Complex Rational Expressions.
F) Solving Rational Expressions.
G) Applications Using Rational

Expressions and Proportions.

| Total | $100.00 \%$ |
| :--- | :--- |

## COURSE CALENDAR.

Chapter1)Linear equations and inequalities in one variable.
A) The addition property of equality.
B) The multiplication property of equality.
C) Solving linear equations.
D) Formulas and Percents.

Quiz\#1
E) An introduction to problem solving.
F) Problem solving in Geometry.
G)Solving Linear Inequalities.

Quiz\#2
Chapter 2) Linear Equations in Two Variables
A) Graphing Linear equations in two variables.
B) Graphing linear equations using intercepts.
C) Slope and Graphing using the slope.

Test\# 1Chapters one and two
Chapter 3) Systems of linear equations
A) .Solving systems of linear equations by graphing.
B) Solving Systems of linear equations by substitution method.
C) Solving System of linear equations by the addition method.
D) Problem solving using systems of equations.

Quiz\# 3.
Chapter 4) Exponents and Polynomials
A) Adding and subtracting polynomials.
B) Multiplying Polynomials.
C) Special Products.
D) Polynomials in several variables.
E) Dividing polynomials using long and synthetic division.
F) Negative exponents and Scientific Notation.

Test \#2chapter 4
Chapter 5 )Factoring polynomials.
A) The Greatest common factor and factoring by Grouping.
B) Factoring Trinomials Whose leading coefficient is one.
C) Factoring trinomials Whose leading coefficient is not one.
D) Factoring Special forms.
E) General Factoring Strategy.
F) Solving Quadratic equations by Factoring.

Test\# 3Chapter 5
Chapter 6) Rational Expressions.
A) Rational Expressions and their Simplification.
B)Multiplying and dividing rational expressions.
C) Adding and Subtracting rational expressions with same denominators.
D) Adding and Subtracting rational expressions with unlike denominator.
E) Complex Rational Expressions.
F) Solving Rational Expressions.
G) Applications Using Rational Expressions and Proportions.

Test \# 4 Chapter 6
Final Exam chapters one to six.
Date: to be assigned.

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Essay
Mid-Term/Final Exam(s)
Objective
Oral Assignments
Problem Solving Exercise
Quizzes
Skill Demonstration
Written Assignments
VIII. INSTRUCTIONAL METHODOLOGY:
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Demonstration
Discussion
Group Activity
Individual Assistance
Lecture
Distance Learning
Audio Visual
Computer Assisted Instruction
Two (2) hours of independent work done out of class per each hour of
lecture or class work, or $\mathbf{3}$ hours lab, practicum, or the equivalent per
unit is expected.
IX. ASSIGNMENTS:
Out-of-class:
A sample out of class assignment will look like: Complete an assigned
set of exercies on an online homework program. (e.g. MathXL or
MyMathLAb) Read the tutorial or view the associated instructional
video as needed.
Reading and Writing:
A typical reading and writing assignment would be; 1. Read the
assigned text section(s). 2. Complete the associated exercises from
that section.
X. TEXTBOOK(S) AND SUPPLEMENT(S):
Angel, A. (2010). Elementary and Intermediate Algebra for College
Students (4th/e). Prentice Hall.
Martin-Gay, E. (2012). Beginning \& Intermediate Algebra (5th/e).
Pearson. ISBN: 978-0321729361
Bittinger, M. (2013). Elementary and Intermediate Algebra: Concepts
\& Applications (6th/e). Addison-Wesley. ISBN: 978-0321848741

Blitzer (2012). Introductory \& Intermediate Algebra for College Students (4th/e). Pearson. ISBN: 978-0321729385


[^0]:    . METHOD OF EVALUATION TO DETERMINE IF OBJECTIVES HAVE BEEN MET BY STUDENTS:
    Class Activity

