IMPERIAL VALLEY COLLEGE

MATH 091 INTERMEDIATE ALGEBRA

COURSE SYLLABUS FALL 2013

Instructor : MUSTAFIZUR RAHMAN

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CLASS MEETINGS:Mondays and Wednesdays from 3:40 PM to ^;10 PM

Class Code:CRN 10646

Units 5

Text book :

Prerequisite:Math 081 with a grade of C or higher or appropriate placement.

Course Philosophy: Topics covered include linear and quadratic equations,relations,functions and graphs,system of equations,logarithmic and exponential functions,conic sections,and sequences and series
Measurable Course Objectives and Minimum standards for grade Grade of C

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

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 and understanding of functions and relations,including one to one functions.

5. Demonstrate and understanding of logarithmic and exponential functions and their functions.

6.Classify and graph ellipses,parabolas,and hyperbolas.

7.Demonstrate an understanding of sequences and series and their operations.

INSTITUTIONAL LEARNING OUTCOME(ISLOS)

!. Communication skills

2.Critical thinking skills

3.Personal resposibilitiy

4.Information literacy

5,Global Awareness

STUDENT LEARNING OUTCOMES(SLOs)

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 sectios.

4Solve 3by3 linear systems by eliminations or/and substitution

5.Solve an application involving exponential functions.

GRADE CRITERIA:

Course must be taken on a letter grade (LG) only

GRADING POLICY

Semester Tests   50% There will be 2 tests,each worth 25%

Final Exam   25%

Homework   15%

Quizzes   5%

EXTRA Credit   5%(good class participation,projects)

STANDARD SCALE:

A=100-90%, B=89%-80% ,   C=79-70%, D= 69-60%, F= 59% and below

Week#	Core content
Week and 2	Systems Linear Equations
	A System of linear equatios in two variables
	B System of linear equations in three variables
	C Application of systems of linear equations
Week 3 &4	FUNCTIONS AND RELATIONS
	A General and specific functions,one to one functions
	B Graphing functions
	C Domain/Range
	D Applications
Weeks 5	INEQUALITIES AND PROBLEM SOLVING
	A Reviewing linear inequalities
	B Compound inequalities
	C Equations and inequalities involving absolute values
Week 6	Review and Midterm !

Week 7   RADICALS

    A Solving equations equations containing radical expressions

    B Introducing complex numbers

    C Applications of radicals

Week 8 and 9   QUADRATIC EQUATIONS

    A Solving quadratic equations by factoring

    B Solving the quadratic equations by completing the square

    C Equations that are reducible to quadratic forms

    D Graphing quadratic functions

    E Applications

Week 10   EXPONENTIAL   AND LOGARITHMIC FUNCTIONS AND EQUATIONS

    A   Exponential and logarithmic graphs

    B Properties of logarithms

    C Solving exponential and Logarithmic equations

    D   Applications of exponential and logarithmic functions

Week 11   NONLINEAR FUNCTIONS,NONLINEAR SYSTEMS AND CONIC SECTIONS

    A   Additional graph of functions

    B Nonlinear systems of equations

    C The circle and ellipse

    D   The hyperbola

WEEK 12   SEQUENCES AND SERIES

    A Sequences and series

B Arithmatic sequences

C Geometric series

Week   13   REVIEW   FOR MIDTERM 2   and the EXAM

WEEK   14 & 15   Review for Final exam

WEEK 16   FINAL EXAM

NOTE   The whole programme   may be modified time to time