IMPERIAL COMMUNITY COLLEGE DISTRICT
IMPERIAL VALLEY COLLEGE

COURSE OUTLINE

DIVISION: Science, Mathematics, and Engineering   **DATE**: April 2003

COURSE TITLE: Graphing Calculators   **COURSE NO.**:   Math 092   **UNITS**:   1

    LEC HRS: 18   .**LAB HRS**:   0   . **HRS. TBA**:   0   .

    If cross-referenced, please complete the following:

    COURSE NO.(s):   .   **COURSE TITLE**:   .

I.   **COURSE/CATALOG DESCRIPTION**:

This course is designed to teach students how to use their graphing calculators. No particular mathematics prerequisites are needed for the examples employed. The focus is on the use of the calculator itself. The course takes the student through the basic steps needed to do arithmetic and function evaluation and to enter, graph and tabulate functions. It will also teach the student to use higher level applications. The topics to be covered are: graphing, lists, statistics, tables, functions, draw, programming, regression equations, and linking.

II.   **A. PREREQUISITES, IF ANY**:

    None

    B. CO-REQUISITES, IF ANY:

    None.

    C. RECOMMENDED PREPARATION, IF ANY:

    Math 080 with a grade of "C" or better

III.   **GRADING CRITERIA**:

    _____. Course must be taken on a "letter-grade" basis only.

    _____. Course may be taken on a "credit" basis or for a letter grade.

    __X__. Course must be taken on a "credit" basis only.

IV. MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "CREDIT":

1. **Students will demonstrate their ability to evaluate basic arithmetic calculations**

2. **Students will demonstrate their ability to graph functions**

3. **Students will demonstrate their ability to input and use statistical data**

4. **Students will demonstrate their ability to solve equations**

5. **Students will demonstrate their ability to write calculator programs**

6. **Students will demonstrate their ability to manage memory**

V.   CORE CONTENT TO BE COVERED IN ALL SECTIONS:

	CORE CONTENT	**APPROX % OF COURSE**
1.	Add, subtract, multiply, divide, use parenthesis, exponents, fractions and radicals	15%
2.	Linear, quadratic, piecewise, parametric, polar, draw	20%
3.	Lists, one and two variable tests, data plots, lines of regression	20%
4.	Graphing, matrices, tables	20%
5.	Calculator language, saving, retrieving, linking	15%
6.	Transferring data to and from a computer Incorporating calculator information into a document	10%

VI. METHOD OF EVALUATION TO DETERMINE IF OBJECTIVES HAVE BEEN MET BY STUDENTS: (Check all that apply.)

Essay	X	Class Activity	X	Written Assignments	X .
Problem Solving Exercise	X	Final Exam	X	Oral Assignments	X .
Skill Demonstration	X	Objective	X	Quizzes	X .

Other _____.

INSTRUCTIONAL METHODOLOGY: (Check all that apply.)

Lecture	X	Discussion	X	Demonstration	X .
Audio Visual	X	Group Activity	X	Lab Activity	.
Computer Assisted Instruction	X	Individual Assistance	X	Simulation/ Case Study	X .

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.

VII.   TEXTBOOK(S) AND SUPPLEMENT(S):

Instruction manuals