

MIDDLESEX COUNTY COLLEGE
EDISON, NEW JERSEY

MATHEMATICS DEPARTMENT

Date: July 30, 2009

Course Title: Mathematics II

Course No. MAT 108

Class Hours: 3

Laboratory Hours: 0

Credit Hours: 3

Department Head Approval: _____
Maria DeLucia, Ph.D.

Dean Approval: _____
Reginald Luke, Ph.D.

Prerequisite:

MAT 107 (Mathematics I)

Textbooks of Course:

Author: Allyn J. Washington
Title: Basic Technical Mathematics, 9th Edition
Publisher: Addison-Wesley

Author: Brase and Brase
Title: Understandable Statistics, 9th Edition
Publisher: D.C. Heath

Catalog Course Description:

A continuation of MAT 107. This course stresses technical math skills and applications. Topics include: solving right triangles, logarithmic, and exponential functions, and radicals. Course also includes many topics from statistics: frequency distribution, presentation of statistical data (graphs, charts, tables), measures of central tendency, measures of dispersion, normal distribution and probability.

Goals:

The course is intended to further develop skills and promote understanding of concepts necessary for the proper application of mathematical principles to problems in the Biological, Chemical, Environmental, and Medical Technologies.

Objectives of the Course:

Students should be able to:

1. understand the universality of the mathematical language in a technological society.
2. understand the changing aspects of our technological society and its importance in our daily lives.
3. be able to apply mathematical concepts to a broad range of practical and real problems.
4. become informed citizens who can and will be able to analyze data intelligently.
5. gather information using tables and recommended handouts to assist in problem solving.
6. use scientific calculator, computer software, and other resources as problem-solving tools.

Course Outline

Chapter	Topics	<u># of Classes</u>
11	Radicals	4
4	Right Triangle	2
13	Exponential and Logarithmic Functions	6
<u>Brase/Brase</u>		
1 (1-3)	What is Statistics	1
2 (1-3)	Organizing Data	2
3 (1-3)	Averages and Variation	3
4 (1-3)	Elementary Probability Theory	2
5.1	Probability Distribution	1
6 (1-3)	Normal Distribution	2

Day-by-Day Outline

Day #	Section
1	11.1 - 11.2
2	11.3
3	11.4
4	11.5
5	4.3
6	4.4
7	13.1
8	13.2

9	13.3
10	13.4
11	13.5
12	13.6 & Review
13	TEST Chapter 11, 4, 13,25
	<u>Brase/Brase</u>
14	1.1-1.3
15	2.1-2.2
16	2.3
17	3.1
18	3.2
19	3.3 and Review
20	TEST - Chapters 1-3
21	4.1-4.2
22	4.3
23	5.1
24	6.1-6.2
25	6.3 and Review
26	TEST - Chapters 4, 5 and 6
27	Review for Final Exam
28	Final Exam