## **MATH 59 OUTLINE**

## FUNDAMENTAL APPLIED MATHEMATICS

TEXT:Fundamentals of Algebraic Modeling, 4th Edition, Timmons/Johnson/McCook

Approved: April 15, 2005 Effective: Fall 2005

| MATERIAL TO BE COVERED   | SECTIONS<br>FROM TEXT   | TIME LINE |
|--|---|-----------|
| Absolute value, order of operations, solving linear equations, evaluating formulas, literal equations.   | 1.2 - 1.4   | 5 Hours   |
| Ratio and proportion, unit conversion, applications of linear equations, applications of proportions and percents.   | 1.5 - 1.7 Lab exercises 3 & 4. Supplement on unit conversion. | 5 Hours   |
| Rectangular coordinate system, graphs of linear equations in two variables, slope, equations for lines, linear inequalities.   | 2.1 - 2.5 Lab<br>exercises 2 & 4.                             | 5 Hours   |
| Functions and function notation, applications of linear functions, variation, intro to non-linear functions.   | 3.1 - 3.5 Lab<br>exercises 1 & 2.                             | 5 Hours   |
| Applications of formulas and functions to: Perimeter, area Pythagorean theorem, finance, consumer credit, business, science and technology.                          | 4.1 - 4.7 Lab exercises 2 & 4.                                | 5 Hours   |
| Graphical and algebraic solutions for systems of linear equations in two variables, applications of linear systems. Optional: non-linear systems.                    | 5.1/5.2/5.4 Lab<br>exercises 1 - 3.<br>Optional: 5.5          | 5 Hours   |
| Statistics: sampling, mean, median, mode, statistical charts and graphs, variation, standard deviation, normal distribution, scatter diagrams and linear regression. | 7.1 - 7.6   | 7.5 Hours |
| Properties of exponents, negative exponents, scientific notation, significant digits.  | Supplement  | 2 Hours   |

<sup>\*\*\*</sup> One hour = 1 hour of face time. \*\*\*\*This outline allows for 3 hours of exams.

16 Week Term: 1 week = 2.8333 hours (face time) 6 Week Term: 1 week = 7.5 hours (face time)

\*\* See reverse side for important Department Policy\*\*

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