

## **MAC1105 – College Algebra**

### Lecture & Exam Schedule

Prepared by Professor Toribio J Matamoros

Textbook – *Algebra & Trigonometry, 10<sup>th</sup> Edition*, by Sullivan

### **COURSE TOPICS**

#### CHAPTER 1 – EQUATIONS AND INEQUALITIES

- Section 1.1 – Linear Equations
- Section 1.2 – Quadratic Equations
- Section 1.3 – Complex Numbers; Quadratic Equations in the Complex Number System
- Section 1.4 – Radical Equations; Equations Quadratic in Form; Factorable Equations
- Section 1.5 – Solving Inequalities
- Section 1.6 – Equations and Inequalities Involving Absolute Value

#### CHAPTER 2 – GRAPHS

- Section 2.1 – The Distance and Midpoint Formulas
- Section 2.2 – Graphs of Equations in Two Variables; Intercepts; Symmetry
- Section 2.3 – Lines
- Section 2.4 – Circles

#### CHAPTER 3 – FUNCTIONS

- Section 3.1 – Functions
- Section 3.2 – The Graph of a Function
- Section 3.3 – Properties of Functions
- Section 3.4 – Library of Functions; Piecewise-defined Functions
- Section 3.5 – Graphing Techniques: Transformations

#### CHAPTER 4 – LINEAR AND QUADRATIC FUNCTIONS

- Section 4.3 – Quadratic Functions and Their Properties

#### CHAPTER 5 – POLYNOMIAL AND RATIONAL FUNCTIONS

- Section 5.2 – Properties of Rational Functions
- Section 5.3 – The Graph of a Rational Function

**CHAPTER 6 – EXPONENTIAL AND LOGARITHMIC FUNCTIONS**

- Section 6.1 – Composite Functions
- Section 6.2 – One-to-One Functions; Inverse Functions
- Section 6.3 – Exponential Functions
- Section 6.4 – Logarithmic Functions
- Section 6.5 – Properties of Logarithms
- Section 6.6 – Logarithmic and Exponential Equations
- Section 6.7 – Financial Models

**LECTURE & EXAM SCHEDULE**

<b>Monday</b>	<b>Wednesday</b>
08/28 Course Introduction	08/30 Section 1.1 & Section 1.2
09/04 <b>NO CLASS</b>	09/06 Section 1.3
09/11 Section 1.4 (Part 1)	09/13 Section 1.4 (Part 2)
09/18 Section 1.5 & Section 1.6	09/20 Chapter 1 Review
09/25 <b>EXAM 1</b>	09/27 Section 2.1
10/02 Section 2.2	10/04 Section 2.3
10/09 Section 2.4	10/11 Chapter 2 Review

<b>Monday</b>	<b>Wednesday</b>
10/16 <b>EXAM 2</b>	10/18 Section 3.1 & Section 3.2
10/23 Section 3.3 & Section 3.4	10/25 Section 3.5
10/30 Section 4.3	11/01 Section 5.2
11/06 Section 5.3	11/08 Chapters 3 – 5 Review
11/13 <b>EXAM 3</b>	11/15 Section 6.1
11/20 Section 6.2	11/22 Section 6.3 & Section 6.4
11/27 Section 6.5	11/29 Section 6.6
12/04 Section 6.7	12/06 Chapter 6 Review
12/11 <b>EXAM 4</b>	12/13 <b>EXAM MAKE-UP DAY</b>