

## **ECSU SUMMARY DISCUSSION CHECKLIST**

### **Functions Studied in Math 098**

*Experiencing Introductory and Intermediate Algebra Through Functions and Graphs,*  
by Thomasson and Pesut 3<sup>rd</sup> edition, Prentice Hall

### **LINEAR FUNCTIONS/EQUATIONS**

#### **Students Should Be Able To:**

- Identify Linear Equations
- Solve Linear Equations:
  1. Addition Property
  2. Multiplication Property
  3. Combination Of Add. & Mult. Property
- Graph Linear Equations:
  1. Describe The Graph
  2. Graphing Techniques
    - A. Creating Tables
    - B. Using Intercepts
    - C. Using Slope And y Intercept
  3. Describe The Slope
  4. Find The Slope
  5. Find y Intercept
- Identify Domain And Range Of Linear Equations

- Write a linear equation when given:
  - A. The Slope And y Intercept
  - B. Two Points
  - C. A Point And Slope
- Solve A System Of Linear Equations:
  - 1. Graphing
  - 2. Substitution Method
  - 3. Addition Method
- Identify Linear Inequalities
- Solve Linear Inequalities:
  - 1. Reverse Inequality
  - 2. Inclusion/Exclusion Of Endpoints
- Graphing Linear Inequalities:
  - 1. Shading
  - 2. Solid/Dash(Broken) Line

## **QUADRATIC FUNCTIONS/EQUATIONS**

### **Students Should Be Able To:**

- Identify Quadratic Equations
- Graph Quadratic Equations:
  - 1. Describe The Graph

2. Graphing Techniques
3. Find  $y$  Intercept
4. Find The Vertex
5. Find The Axis Of Symmetry
6. Vertical Translations
7. Horizontal Translations

- Identify Domain And Range Of Quadratic Equations
- Identify Quadratic Inequalities
- Solve Quadratic Inequalities

### **CUBIC FUNCTIONS/EQUATIONS**

#### **Students Should Be Able To:**

- Identify Cubic Equations
- Graph Cubic Equations:
  1. Describe The Graph
  2. Graphing Techniques
- Identify Domain And Range Of Cubic Equations

### **ABSOLUTE VALUE FUNCTIONS/EQUATIONS**

#### **Students Should Be Able To:**

- Identify Absolute Value Equations
- Solve Absolute Value Equations
- Graph Absolute Value Equation:

1. Describe The Graph
  2. Graphing Techniques
- Identify Domain And Range Of Absolute Value Equations