

I. COURSE DESCRIPTION:

Math 121 is a general course in the fundamentals of mathematics. It includes a study of concepts of numbers and fundamental operations with numbers, formulas, equations, percents, and statistics.

II. PREREQUISITES:

Math 2 or satisfactory score on placement test.

III. INTRODUCTION:

This course will provide the mathematical basis for Business Mathematics and other fields.

IV. MATERIAL TO BE COVERED:

Unit I	Chapter 1: 1.2 – 1.7
Unit II	Chapter 2: 2.1 – 2.6
Unit III	Chapter 3: 3.1 – 3.6
Unit IV	Chapter 4: 4.1 – 4.4
Unit V	Chapter 7: 7.1 – 7.6
Unit VI	Chapter 10: 10.1 – 10.2, 10.3 & 10.4 optional

V. BASIC CONCEPTS:**Unit I – Chapter 1: Arithmetic, Calculators, and Problem Solving**

- 1.2 Formulating the Problem
- 1.3 Fractions and Decimals
- 1.4 Rounding and Estimation
- 1.5 Exponents and Prime Factorization
- 1.6 Common Fractions
- 1.7 Adding and Subtracting Fractions

Unit II – Chapter 2: Sets of Numbers

- 2.1 Symbol Shock
- 2.2 Addition of Integers
- 2.3 Subtraction of Integers
- 2.4 Multiplication of Integers
- 2.5 Division of Integers
- 2.6 Rational and Irrational Numbers

Unit III – Chapter 3: Introduction to Algebra

- 3.1 Polynomials
- 3.2 Similar Terms
- 3.3 Simplification
- 3.4 Equations
- 3.5 Solving Equations
- 3.6 Problem Solving with Algebra

Unit IV – Chapter 4: Percents and Problem Solving

- 4.1 Ratio and Proportion
- 4.2 Problem Solving with Proportions
- 4.3 Percent
- 4.4 Problem Solving with Percents

Unit V – Chapter 7: Applications of Percent

- 7.1 Discount, Sale Price, and Sales Tax
- 7.2 Simple Interest
- 7.3 Buying on Credit
- 7.4 Credit Card Interest
- 7.5 Compound Interest
- 7.6 Buying a Home

Unit VI – Chapter 10: Statistics

- 10.1 Frequency Distributions and Graphs
- 10.2 Measures of Central Tendency
- 10.3 Measures of Position (optional)
- 10.4 Measures of Dispersion (optional)

VI. SUGGESTED WEEKLY SCHEDULE – 16 WEEK SEMESTER:

- Week 1: 1.2, 1.3
- Week 2: 1.4 – 1.6
- Week 3: 1.7, **Test 1**
- Week 4: 2.1, 2.2
- Week 5: 2.3, 2.4, 2.5
- Week 6: 2.6, **Test 2**
- Week 7: 3.1, 3.2
- Week 8: 3.3, 3.4, 3.5
- Week 9: 3.6, **Test 3**
- Week 10: 4.1, 4.2, 4.3
- Week 11: 4.4, **Test 4**
- Week 12: 7.1, 7.2, 7.3
- Week 13: 7.4, 7.5, 7.6
- Week 14: 7.6, **Test 5**, 10.1

Week 15: 10.2, 10.3, 10.4
Week 16: **Final Exam** to be given during scheduled exam period

VII. SUGGESTED WEEKLY SCHEDULE – 10 WEEK SEMESTER:

Week 1: 1.2 – 1.5
Week 2: 1.6 – 1.7, **Test 1**
Week 3: 2.1 – 2.4
Week 4: 2.4 – 2.6, **Test 2**
Week 5: 3.1 – 3.4
Week 6: 3.4 – 3.6, **Test 3**
Week 7: 4.1 – 4.4
Week 8: 7.1 – 7.3, **Test 4**
Week 9: 7.3 – 7.6
Week 10: 10.1 – 10.4, **Test 5, Final Exam**

VIII. ADDITIONAL MATERIAL AVAILABLE TO STUDENTS:

1. Videos available on DVD in LRC, Media Resources (not textbook specific)
2. Publisher Web Site
www.thomsonedu.com/math/smithpower