Math 168 - Weekly Schedule

Textbook: Finite Mathematics, 12th Edition, by Tan

Note: This is a fall or spring schedule. In summer, this schedule is accelerated by a factor of 3 in order to accommodate a 5-week session.

• Week 1

o Sections 1.3, 1.4

Topics covered: Linear Functions and Mathematical Models, Intersection of Straight Lines

• Week 2

o Sections 2.1, 2.2*, 2.3**

Topics covered: Systems of Linear Equations

*Demonstrate Gauss-Jordan elimination for a small system of linear equations. Students are responsible for pivoting about an element, but not the whole Gauss-Jordan process. Students will use rref to solve systems.

**Students will use rref to solve all systems in this section.

• Week 3

o Sections 2.4, 2.5, 3.1

Topics covered: Matrix Arithmetic, Matrix Multiplication, Graphing Systems of Linear Inequalities

Week 4

o Review, Exam 1 (1.3, 1.4, 2.1-2.5, 3.1)

• Week 5

o Sections 3.2, 3.3, 6.1

Topics covered: Setting up Linear Programming Problems, Solving Linear Programming Problems, Sets

Week 6

o Sections 6.1, 6.2, 6.3, 6.4

Topics covered: Sets, Counting, Multiplication Principle, Permutations

Week 7

o Section 6.3, 6.4, 7.1

Topics covered: Multiplication Principle, Permutations, Combinations, Experiments, Sample Spaces, and Events

• Week 8

o Review, Exam 2 (3.2, 3.3, 6.1-6.4, 7.1)

• Week 9

o Sections 7.2, 7.3, 7.4

Topics covered: Definition and Rules of Probability, Counting Techniques in Probability

• Week 10

o Sections 7.5, 7.6

Topics covered: Conditional Probability, Independence, Bayes' Theorem

• Week 11

o Sections 8.1, 8.2, 8.3

Topics covered: Distributions of Random Variables, Expected Value, Variance, Standard Deviation (Chebychev's optional)

• Week 12

o 8.4, Review, Exam 3 (7.2-7.6, 8.1-8.4)

Topics covered: Binomial Distribution

• Week 13

o Sections 8.5, 8.6, 5.1

Topics covered: Normal Distribution (excluding normal curve approximation of binomial distribution), Finance

• Week 14

o Sections 5.2, 5.3

Topics covered: Finance

• Week 15

o Sections 5.2, 5.3

Topics covered: Finance

• Week 16/17

o Review for Final, Final Examinations