MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
1		
1/17	**No Class. Campus is closed due to weather.**	
2		
1/22	**Syllabus**	
1/24	**3.1: Simple Interest** ➢ **Compute simple interest using the simple interest formula.** ➢ **Solve problems involving investments and the simple interest formula.** **3.2: Compound and Continuous Compound Interest** ➢ **Compute compound and continuous compound interest.** ➢ **Compute the annual percentage yield of a compound interest investment.**	**HW1 and HW2 due 2/19 by 11:59pm**
3		
1/29	**3.3: Future Value of an Annuity; Sinking Funds** ➢ **Compute the future value of an annuity.** ➢ **Solve problems involving sinking funds.**	**HW3 due 2/19 by 11:59pm**
1/31	**3.4:Present Value of an Annuity; Amortization** ➢ **Calculate the present value of an annuity.** ➢ **Construct amortization schedules.** ➢ **Calculate the payment for a loan.**	**HW4 due 2/19 by 11:59pm**

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
4		
2/5	**4.1:Systems of Linear Equations in Two Variables** ➢ **Solve systems of linear equations in two variables by graphing, using substitution and addition** ➢ **Solve applications of linear systems.** **4.2: Systems of Linear Equations and Augmented Matrices-Part 1** ➢ **Use terms associated with matrices.**	**HW5 due 2/19 by 11:59pm**
2/7	**4.2: Systems of Linear Equations and Augmented Matrices-Part 2** ➢ **Set up and solve the augmented matrix associated with a linear system in two variables.** ➢ **Identify the three possible matrix solution types for a linear system in two variables.** **4.3 Gauss-Jordan Elimination-Part 1** ➢ **Convert a matrix to reduced row echelon form.**	**HW6 due 2/19 by 11:59pm**
5		
2/12	**4.3 Gauss-Jordan Elimination-Part 2** ➢ **Solve systems by Gauss-Jordan elimination.** ➢ **Solve applications using Gauss-Jordan elimination.** **4.4: Matrices: Basic Operations** ➢ **Perform addition and subtraction of matrices, the scalar product of a number and a matrix.** ➢ **Calculate a matrix product**	**HW7 and HW8 due 2/19 by 11:59pm**
2/14	**4.5: Inverse of a Square Matrix** ➢ **Identify identity matrices for multiplication.** ➢ **Find the inverse of a square matrix.** **Work with applications of inverse matrices such as cryptography.**	**HW9 due 2/19 by 11:59pm**

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
6		
2/19	**Test 1 Covers Chapter 3 and Chapter 4 up to Section 4.5** **(Extra credit for Test 1 is due at the beginning of class)**	**All Homework for Test 1 are due this day by 11:59pm**
2/21	**4.6: Matrix Equations and Systems of Linear Equations** ➢ **Formulate matrix equations and use matrix equations to solve linear systems.** ➢ **Solve applications using matrix equations** **5.1: Linear Inequalities in Two Variables-Part 1** ➢ **Graph linear inequalities in two variables.**	**HW10 due 3/26 by 11:59pm**
7		
2/26	**5.1: Linear Inequalities in Two Variables-Part 2** ➢ **Solve applications of linear inequalities in two variables.** **5.2: Systems of Linear Inequalities in Two Variables** ➢ **Solve systems of linear inequalities graphically.** ➢ **Solve applications involving systems of linear inequalities.**	**HW11 and HW12 due 3/26 by 11:59pm**
2/28	**5.3: Linear Programming in Two Dimensions: A Geometric Approach** ➢ **Solve linear programming problems using a geometric approach.** ➢ **Solve applications using linear programming methods.**	**HW13 due 3/26 by 11:59pm**
8		
3/5	**6.2: The Simplex Method: Maximization** ➢ **Set up the initial system: the Simplex Tableau.** ➢ **Use the pivot operation on the Simplex Tableau.** ➢ **Solve applications using the Simplex Process.**	**HW14 due 3/26 by 11:59pm**

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
3/7	**6.3:The Dual Problem: Minimization** ➢ **Formulate the dual problem.** ➢ **Solve minimization problems.**	**HW15 due 3/26 by 11:59pm**
9		
Spring Break (Offices Closed): March 12-18		
10		
3/19	**7.2: Sets** ➢ **Identify and use set properties and set notation.** ➢ **Perform set operations** ➢ **Solve applications involving sets.** **7.3: Basic Counting Principles-Part 1** ➢ **Draw and interpret Venn diagrams.**	**HW16 due 3/26 by 11:59pm**
3/21	**7.3: Basic Counting Principles-Part 2** ➢ **Apply and use the multiplication principle.** **Brief Review of Test 2 if time allows**	**HW17 due 3/26 by 11:59pm**
11		
3/26	**Test 2 Covers Section 4.6, Chapter 5, 6 and 7 up to 7.3.** **(Extra credit for Test 2 is due at the beginning of class)**	**All Homework for Test 2 are due this day by 11:59pm**

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
3/28	**7.4: Permutations and Combinations** ➢ **Set up and compute factorials.** ➢ **Apply and calculate permutations and combinations** ➢ **Solve applications involving permutations and combinations.** **8.1: Sample Spaces, Events, and Probability** ➢ **Define and identify what is meant by an experiment.** ➢ **Construct sample spaces and identify events.** ➢ **Calculate probabilities of simple events.**	**HW18and HW19 due 4/23 by 11:59pm**
12		
4/2	**8.2: Union, Intersection, and Complement of Events; Odds** ➢ **Determine the union and intersection of events.** ➢ **Determine the complement of an event.** ➢ **Determine the odds of an event.** **8.3: Conditional Probability, Intersection, and Independence – Part 1** ➢ **Calculate conditional probability.**	**HW20 due 4/23 by 11:59pm**
4/4	**8.3: Conditional Probability, Intersection, and Independence – Part 2** ➢ **Use the product rule to calculate the probability of the intersection of two events.** ➢ **Construct probability trees.** ➢ **Determine if events are independent or dependent.** **8.4: Bayes' Formula – Part 1** ➢ **Solve problems using Bayes formula or a probability tree.**	**HW21 due 4/23 by 11:59pm**
Last day to drop and receive a "W" for 16-week Courses: Friday, April 6th		

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
13		
4/9	**8.4: Bayes' Formula-Part 2** ➢ **Solve problems using Bayes formula or a probability tree.** **8.5: Random Variables, Probability Distribution, and Expected Value-Part 1** ➢ **Identify what is meant by a random variable.**	**HW22 due 4/23 by 11:59pm**
4/11	**8.5: Random Variables, Probability Distribution, and Expected Value-Part 2** ➢ **Create and use a probability distribution for a random variable.** ➢ **Compute the expected value of a random variable.** **11.1: Graphing Data** ➢ **Create bar graphs, broken-line graphs, and pie graphs.** ➢ **Create frequency distributions and histograms.**	**HW23 and HW24 due 4/23 by 11:59pm**
14		
4/16	**11.2:Measures of Central Tendency** ➢ **Calculate the mean of a distribution.** ➢ **Identify the median and the mode of a distribution.**	**HW25 due 4/23 by 11:59pm**
4/18	**11.3: Measures of Dispersion** ➢ **Compute the range of a set of data.** ➢ **Compute the standard deviation for both grouped and ungrouped data.** **Brief Review of Test 3 if time allows**	**HW26 due 5/7 by 11:59pm**
15		

MATH 1324 LECTURES, HOMEWORK AND EXAMS CALENDAR

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
4/23	**Test 3 Covers Section 7.4, Chapter 8 and 11 up to Section 11.2.** **(Extra credit for Test 3 is due at the beginning of class)**	**All Homework for Test 3 are due this day by 11:59pm**
4/25	**11.4: Bernoulli Trials and Binomial Distributions** ➢ **Construct a Bernoulli experiment or trial.** ➢ **Use the binomial formula.** ➢ **Construct a binomial distribution.** ➢ **Solve applications involving Bernoulli trials and binomial distributions.**	**HW27 due 5/7 by 11:59pm**
16		
4/30	**11.5: Normal Distributions** ➢ **Identify what is meant by a normal distribution.** ➢ **Find the area under normal curves.** ➢ **Approximate the binomial distribution with a normal distribution.**	**HW28 due 5/7 by 11:59pm**
5/2	**Final Exam Review**	
17		
The final exam is on Monday, May 7th from 12-1:50pm. **The final exam is COMPREHENSIVE.** **Homework 26, 27 and 28 are due this day by 11:59pm** **(Extra credit for the final is due at the beginning of class)**		

We will try to follow this schedule very closely. However, at times the course structure may need to be adjusted to provide for a better learning environment. Thus I reserve the right to make changes to the syllabus and this schedule. All changes will be announced in class.