Probability Syllabus for Spring 2016

Math 152 section 001 crn 18538
Monday Wednesday Friday 11:30 - 12:30 BR-18
Professor John Jernigan
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Office: B2-25C 17th and Spring Garden
Text: Notes from the Web Site above

Topics will include: Elementary set theory, counting, inclusion-exclusion, permutations and combinations, the binomial theorem, probability, sample space, events, a priori and a posteriori probability models, conditional probability, independence, discrete random variables, mean, variance, standard deviation, normal approximation to the binomial distribution.

Your syllabus, homework assignments, practice tests and quizzes are posted on the web under the address above. Please use this resource to your benefit. In particular, you may check the quizzes in advance by going to the site. In addition, I will assign worksheets from the site to hand in. This will count as a quiz towards your grade. I have also included several links you may find useful.

There will be three tests and a final exam, as well as a short (5 question) daily quiz selected from the homework exercises. The quizzes are intended as a check on your progress, and will be part of the grade. There will be absolutely no makeup quizzes given.

Grading will be as follows: the total quiz score and class participation counts as one test and the final counts as two. Thus the formula for grading will be

$$\frac{\text{test } 1 + \text{test } 2 + \text{test } 3 + \text{total quiz} + 2 \times \text{final}}{6}$$

Please bring your textbook, pencil and paper to each class, as we will often do problems during the class period. You will also need a calculator. *Your phone will not be sufficient and will not be permitted in class.* We will cover a significant amount of material this semester. You are encouraged to read ahead to prepare for class, as well as complete the homework assignments.

My office hours are Monday Wednesday Friday 2:00 - 4:00. Please do not hesitate to come to me with any class problems you are having. There is no reason for any one who works hard to do poorly in this class. You are also encouraged to use the Learning Lab in room B2-36.

It is the policy of CCP that no more than six (6) absences are allowed during the course of the semester. Any student missing more than six classes will be automatically dropped from the class. Cell phones must be turned off and put away during class.

Students who believe they may need an accommodation based on the impact of a disability should contact me privately to discuss their accommodation form and specific needs as soon as possible, but preferably within the first week of class. If you need to request reasonable accommodations, but do not have an accommodation form, please contact the Center on Disability, room BG-39, phone number 215-751-8050.

Upon successful completion of this course, students will be able to:

1. Perform basic set operations
2. Apply basic counting techniques to solve counting problems
3. Create probability models for simple experiments and solve probability problems
4. Solve problems involving probability distributions

In the event of inclement weather there are several ways of determining whether CCP is open. You may listen for CCP's school closing number 238 or 2238 on KYW radio at 1060 on the AM dial or check KYW's school closing web page at http://www2.kyw1060.com/schools/ or check http://www.ccp.edu/

While I am aware that most students take math courses only when required to do so, I sincerely hope that this course will not only be stress free, but also enjoyable and instructive. Much of this depends on you. Please ask questions, give your opinion, and participate!

Course Schedule

1.3	Introduction to Probability
1.1	Sets and Set Operations
1.2	Venn Diagrams
1.4	Basic Concepts of Probability
2.1	The Multiplication Principle, Permutations
2.2	Combinations
Exam 1	
1.5	Conditional Probability
1.6	Baye's Theorem
2.3	Probability Applications of the Counting Principles
2.4	Binomial Probability
2.5	Probability Distributions, Expected Value
Exam 2	
3.1	Measures of Central Tendancy
3.2	Measures of Variation
3.3	The Normal Distribution
	The Poisson Distribution
	Random Walks
Exam 3	
Review and Final	