



PROBABILITY

Course Syllabus

Fall 2014

Math 401/501

Anke van Zuylen

Basic information:

- Class time & location: TR 3:30-4:50 p.m., Millington 211
- Instructor:
Anke van Zuylen
Jones Hall 125
Phone: (757) 221-2036 (Office)
Email: anke@wm.edu
Office Hours: TW 9:30-11 am

Purpose: A student completing this course should understand basic probability concepts and how to apply them to real-world situations.

Prerequisite: Linear Algebra (Math 211), Multivariate Calculus (Math 212 or Math 213), and Foundations of Mathematics (Math 214).

Textbook: Leemis (2011), *Probability*

Grades: Course grades will be determined by the following weights:

Homework	25%
Midterm 1	20%
Midterm 2	20%
Final exam	35%

Letter grades will be no stricter than the following:

$A > 93 > A^- > 90 > B^+ > 87 > B > 83 > B^- > 80 > C^+ > 77 > C > 73 > C^- > 70 > D^+ > 67 > D > 63 > D^- > 60 > F$.

Tests: The two midterm exams will be held in class on Thursday October 9 and November 20. The final exam will be held on December 11, 2:00-5:00 pm. The final exam is cumulative. The room for the final exam will be announced in late November on the course blackboard site.

Homework: Homework will be assigned at the end of every Thursday class period. This homework set is due at the beginning of the next Thursday class period.

You are allowed to discuss the homework problems with each other, but you have to write down your solutions *on your own*.

Course outline:

1. Introduction
2. Probability
3. Random Variables
4. Common Discrete Distributions
5. Common Continuous Distributions
6. Joint Distributions
7. Functions of Random Variables
8. Limit Theorems