Statistics 7201
Theory of Probability
Autumn 2014

CONTACT INFORMATION

Lecturer   Radu Herbei, Ph.D.
herbei@stat.osu.edu
Office hours: 223 Cockins Hall, MW 12:30pm-1:30pm, and by appointment.

CLASS INFORMATION

Location:	Lecture: MWF 10:20am – 11:15am, Dulles Hall 0020.
Website:	http://carmen.osu.edu
Required text	*A Probability Path*
	by Sidney Resnick, Birkhäuser, 2005.

OTHER REFERENCES:

- *Probability and Measure*, by Patrick Billingsley, Wiley,1995.

- *A Course in Probability Theory*, by K. L. Chung, Academic Press, 1990

- *Probability: Theory and Examples*, by R. Durrett, Duxburry Press.

- *Probability for Statisticians*, by G. Shorack, Springer.

Please read these books as the course progresses, as I will not cover everything in class.

COURSE DESCRIPTION AND OBJECTIVES
Statistics 7201 is a measure-theoretic probability course, which introduces probability from a general and rigorous mathematical viewpoint. This course complements other courses on this topic that you may have had, and will help you gain a deeper and more thorough understanding of probability and its relevance in statistics and in the real world. Students will also develop skills in constructing rigorous proofs.

PREREQUISITES
You will need to be able to work with limits. Experience in theorem proving, real analysis and advanced calculus is a plus.

EVALUATION
Homework 25%, Midterm exam I – 20%, Midterm exam II – 20% , Final exam 30%. Participation in class discussions will be a factor (5%) in the final grade.

HOMEWORK
Homework will be assigned regularly. Late assignments will **NOT** be accepted. Students are required to write clear and detailed answers to all homework problems. You are encouraged to discuss homework problems with other students but you have to prepare and present your own solutions. Feel free to ask me for help after you have made an attempt to solve the problems. **Do not copy** any part of a homework.

MIDTERM AND FINAL EXAM
There will be two **midterms** and one **final exam**. All exams are in-class and closed book. The final exam will be comprehensive.
Midterm I will be on **Friday, October 3, 2014** in class.
Midterm II will be on **Friday, November 7, 2014**, in class.
The **Final exam** will be on **Thursday, December 11, 2014, 10:00am − 11:45am**, in class.

ATTENDANCE POLICY
It is strictly required to attend all the classes. It is the student's responsibility to make up for the material covered in class during any absence.

SPECIAL ACCOMMODATIONS

If you need any accommodations based on the impact of a documented disability, contact the instructor privately to discuss specific needs, within a week. You should also contact the Office of Disability Services to coordinate special accommodations.

ACADEMIC MISCONDUCT
Academic misconduct **will not be tolerated** and will be dealt with procedurally in accordance with university policy.

DISCLAIMER
This syllabus should be taken as a fairly reliable guide for the course content. However, you cannot claim any rights from it and in particular I reserve the right to change the methods of assessment. Official announcements will ALWAYS be those made in class.