

Probability and Statistics
Syllabus

MTH U481

Summer I - 2009

Instructor: S. Eigen, best contact method **email:** s.eigen@neu.edu

Office Hours: MTWTh 12:00-1:00 in 527 Lake Hall, x5647

Text: An Introduction to Mathematical Statistics and its Applications, R. Larsen and M. Marx, fourth edition, Prentice Hall.


Website: <http://www.math.neu.edu/eigen/U481Summer2009.html>

Grading: Quizzes 60%, Final Exam 40% We will have two quizzes per week (Tuesday and Thursday). There will be **no make-up** quizzes; instead the two lowest quiz scores will be dropped. This policy applies even if you have a perfectly justifiable excuse to miss a quiz, so don't ask for a make-up. If you miss a quiz, then that quiz will be one of the quizzes dropped. All exams will be open book and open notes - calculators permitted.

First Quiz: Thursday May 7, 2009 on Sections 2.2 and 2.3

IMPORTANT:

1. The best way to learn this material is to do the homework problems every week. Please ask me questions about things you don't understand. DON'T wait until you feel completely lost!
2. It is your responsibility to be aware of any changes the instructor may make to the syllabus as they are announced in class, or as posted on the course webpage. Students are responsible for all information given when they are absent.
3. This is a Calculus-based course, and assumes a working knowledge of single-variable calculus as well as some acquaintance with multi-variable calculus (including multiple integration).
4. The grade I (Incomplete) will be given only in exceptional circumstances. You must have a passing average on the quizzes; you must have a good attendance record; you must have missed the Final for a good reason.
5. It is University policy that no grade, including an incomplete, can be changed after one year. Exceptions must be authorized by the Academic Standing Committee.
6. Cheating will not be tolerated. All incidents of cheating will be reported to the Office of Judicial Affairs. The University's cheating policy and related disciplinary actions are detailed in the Student Handbook. The Handbook also includes a description of what is considered cheating by the University. Cheating in this class includes (but is not limited to): looking at the papers of others during a quiz or test, talking to other students during a quiz or test.
7. If you have a concern about the course or the instructor that is not or cannot be resolved by speaking with the instructor, contact Professor A. Martsinkovsky (the undergraduate advisor—x5510, alexmart@neu.edu, 471 LA).
8. All students without legitimate conflicts will take the final exam at the scheduled date and time. Do not make travel plans that conflict with the final exam.
9. The last day to drop a course without a W grade is May 15. The last day to drop a course with a W grade is June 5, (be sure to inform your instructor).


Probability and Statistics
 Syllabus

MTH U481

Summer I - 2009

All information contained in this schedule is provisional and will change during the course of the semester. It is your responsibility to obtain information about changes

2.2	Sample Spaces, Algebra of Sets	1, 2, 4, 13, 16, 19, 26, 29, 31, 32
2.3	The Probability Function	1, 2, 5, 9, 10, 15
	Quiz 1	
2.4	Conditional Probability	1, 2, 3, 11, 20, 21, 22, 23, 29, 39, 42, 48, 49
	Quiz 2	
2.5	Independence	1, 2, 5, 16, 18, 20, 22, 25
	Quiz 3	
3.2	Binomial Distribution	1, 3, 4, 7, 14
3.3	Discrete Random Variables	1, 3, 9, 12
	Quiz 4	
3.4	Continuous Random Variables	1, 3, 4, 5, 7, 9, 11
	Quiz 5	
3.5	Expected Value	4, 6, 7, 8, 9, 12, 14, 23, 30, 31
3.6	The Variance	2, 3, 5, 6, 7, 11
	Quiz 6	
3.7	Joint Densities	5, 7, 8, 15, 19b
3.9	Properties of Mean/Variance	1, 4, 6, 8, 11, 16, 18, 19
	Quiz 7	
4.2	Poisson Distribution	1, 7
4.3	Normal Distribution	1ab, 2bc, 7, 8, 11, 16, 21, 23, 26, 33
	Quiz 8	
5.3	Interval Estimation	8, 9, 11, 17
	Quiz 9	
5.2	MLE	2, 3, 5, 7, 10, 12
	Quiz 10	
6.2	Decision Rule	1, 2, 3, 4, 8, 10
	Quiz 11	
6.3	Testing Binomial Data	1, 3
7.4	Drawing Inference about μ	4, 5, 7, 9a, 10, 14, 18, 21
	Quiz 12	