

Probability

MATH 230.05—Spring 2017

MW 8:30-9:45 in Physics 259

Instructor: Matthew Junge

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Coure Website www.mathjunge.com/teaching/230

Office Hours: Mondays and Wednesdays 3:00–4:00pm in Physics 106.

Course Description: We will cover basic probability, combinatorial probability, conditional probability, Markov chains, and limit theorems. The ideal outcome is an appreciation and intuition for randomness.

Textbook: *Elementary probability theory* the 2013 version by Rick Durrett. You may purchase a copy or use the portable document format provided on the web. I suggest using the electronic copy.

Grading: Your grade will be determined as follows

5 homework assignments	15%
5 non-cumulative exams, drop lowest of first 4, must take the 5th	85%

Homework: There are five. One for each chapter covered. They are due on the corresponding exam day.

Exams: You will be allowed to use **one** side of a single **handwritten** 8.5 x 11 inch sheet of notes. **Calculators and other electronic devices will not be permitted.** These are the tentative dates for the exams:

Exam 1	Chapter 1	Wednesday, 2/1	in lecture
Exam 2	Chapter 2	Wednesday, 2/22	in lecture
Exam 3	Chapter 3	Wednesday, 3/22	in lecture
Exam 4	Chapter 6	Wednesday, 4/12	in lecture
Exam 5	Chapter 4	Monday, 5/1	in TBA

Make-ups: In case of observance of religious holidays or participation in university sponsored activities, notify me least 1 week in advance for the midterm. You will be required to provide documentation for your absence. Make-up exams will not be given otherwise. For example, sickness and family emergencies are not excuses for missing multiple midterms. This is part of why you are allowed to drop one.

MAP: *Matt Approved ProblemsTM* will be three or so exam-like problems I will circulate the week before each exam. They are not worth points, but are meant to be illustrative of what to expect on an exam. Typed solutions will be given, and also a MAPOUT session where I go over the solutions will occur in Physics 235 Monday at 4:40pm.

Academic Dishonesty: Don't cheat. Any cheating will result in a 0 on the exam, and it will not be admissible as your exam drop.

Calendar:

WK	MON	WED	HOMEWORK	MAP
1		1/11 1.1, 1.2		
2	MLK DAY	1/18 1.2, 1.3		
3	1/23 1.4, 1.5	1/25 1.5, 1.6		
4	1/30 Review	2/1 Exam 1	7, 10, 14, 20, 25, 33, 37, 43, 48, 52, 56	
5	2/6 2.1	2/8 2.2, 2.3		
6	2/13 2.4, 2.5	2/15 2.5, 2.6		
7	2/20 Review	2/22 Exam 2		
8	2/27 3.1, 3.2	3/1 3.3		
9	3/6 3.4	3/8 3.4		
10	3/20 Review	3/22 Exam 3		
11	3/27 6.1, 6.2	3/29 6.3, 6.4		
12	4/3 6.5	4/5 6.6		
13	4/10 Review	4/12 Exam 4		
14	4/17 4.1, 4.2	4/19 4.3, 4.4		
15	4/24 4.5	4/26 4.6		
16	5/1 Exam 5			