Math 170B: Probability Theory
Lecture 4, Spring 2018

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Course Website: http://www.math.ucla.edu/~ziegler/170b.html
Textbook: Introduction to Probability by D. P. Bertsekas and John N. Tsitsiklis, 2nd edition
Prerequisite: Math 170A

Grading: Your final average in this class will be computed as the maximum of the following schemes:

<table>
<thead>
<tr>
<th>Scheme 1:</th>
<th>Scheme 2:</th>
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<tbody>
<tr>
<td>Homework: 20%</td>
<td>Homework: 20%</td>
</tr>
<tr>
<td>Midterm 1: 20%</td>
<td>Max. of Midterm 1 and 2: 30%</td>
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<tr>
<td>Midterm 2: 20%</td>
<td>Final exam: 50%</td>
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<tr>
<td>Final exam: 40%</td>
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- Approximately eight (8) homework assignments will be assigned. The lowest two (2) scores will be dropped. No late homework will be accepted.

- The final exam is mandatory. No makeup finals – not attending the final is an automatic F.

A final average of 80% or higher will guarantee you at least a A−, a final average of 70% or higher will guarantee you at least a B−, and a final average of 60% or higher will guarantee you at least a C−. However, final letter grades may be (and usually are) curved by adjusting these cut-offs lower. In other words, final grades may be curved, but the curve can only help you, not hurt you. If everyone in the class earns above 80%, everyone in the class will get an A or A−. I do not generally curve individual midterm scores or final exam scores, however.

Homework: Homework problems will usually be assigned each week. The assignments will be announced in class and posted on the course website. You will turn them in to the TA during your discussion section each Thursday. Graded homework will be returned in section as well. Your score on each homework will be based on how thoroughly and correctly you answer a few problems, as well as overall completion of the rest of the assignment. Late homework will not be accepted, but your two (2) lowest homework scores will be dropped.

Discussion sections: You will have discussion sections with your TA once a week on Thursdays.
Exams: There will be two (2) midterms and a (1) final exam. Please bring a photo ID to every exam. All cellphones and electronic devices should be turned off and put away in bags during the exams. During the exams, you may use a calculator, but not a graphing calculator nor a cell phone/tablet calculator app. The exams will be closed-book. There will be no make-ups for any missed exams. If you miss a midterm for a legitimate, documented reason, your grade will be computed using the second scheme above. You must take the final exam in order to pass the class. The exams are scheduled for the following dates:

Midterm #1: (tentatively) Friday, May 4, 2018 (week 5)
Midterm #2: (tentatively) Friday, May 18, 2018 (week 7)
Final exam: Friday, June 15, 2018 from 11:30am - 2:30pm

It is essentially impossible to learn mathematics without doing a lot of problems. I urge you to do the homework with care and on time. You should also look through and attempt as many of the unassigned problems as you have time for. The basic rule is: the more problems you do, the more thoroughly you will learn the material. You may discuss homework problems with other students, the TA or me, before they are turned in. In fact, the right kind of discussion can be quite valuable. I do expect two things: (i) you should seriously try to do the exercise yourself before discussing it with anyone, and (ii) you should write up the solution yourself after understanding it thoroughly without following/copying someone else's written version or from the answers in books or the internet.

To be more precise, if you do decide to collaborate with your peers and/or look at solutions from other resources, to avoid any appearance of plagiarism or copying, you should write down the names of the students with whom you have collaborated with and cite any resources where you have seen the solutions. This will help to avoid any possibility of misunderstanding etc. Otherwise, it will be considered cheating and will not be tolerated per policy of UCLA.

Please put the following information in the upper right hand corner of the first page:

• Full Name.
• Student ID #.
• Math 170B, Homework #x.

Label the chapter + section number as well as the problem number. Theorems or propositions from the lecture or textbook must be cited. You may also use (and cite) results from other sources (e.g., other textbooks) as long as the problem is not trivialized. Your work must be organized in a neat and coherent manner. The ordering of your presentation must be clear on the page. All answers must be supported by the relevant justifications and calculations. A correct answer without explanation will receive zero credit while an incorrect answer with substantial explanation or progress may receive partial correct.

(Martin Ziegler)

Notice about academic integrity
From the office of the Dean of Students:
"With its status as a world-class research institution, it is critical that the University uphold the highest standards of integrity both inside and outside the classroom. As a student and member of the UCLA community, you are expected to demonstrate integrity in all of your academic endeavors. Accordingly, when accusations of academic dishonesty occur, The Office of the Dean of Students is charged with
investigating and adjudicating suspected violations. Academic dishonesty, includes, but is not limited to, cheating, fabrication, plagiarism, multiple submissions or facilitating academic misconduct.”

Students are expected to be aware of the University policy on academic integrity in the UCLA Student Conduct Code: 
Please note the sections on (1) cheating, (2) plagiarism, and (3) unauthorized study aids.

**Violation of course policy involving plagiarism, cheating, or possession of course materials during exams will be referred to the Dean of Students**, who will be encouraged to take strong action. Do not cheat! The penalties can be very harsh. Do not believe it if you hear that “everyone does it.” You generally do not hear about the punishments because they are kept confidential. If you are found responsible by the Dean of Students for violating course policy, cheating on any course materials, or giving or receiving unauthorized help, a zero will be assigned for the entire assignment. No exceptions will be made! Past examples of penalties also include loss of an entire term of credit and suspension for several terms. If you plan to apply to graduate or professional school, such a negative mark on your record may be a major obstacle to admission.

**Notice about sexual harassment, discrimination, and assault**
Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. Students who have experienced sexual harassment or sexual violence can receive **confidential** support and advocacy from a CARE advocate:
- The CARE Advocacy Office for Sexual and Gender-Based Violence
- 1st Floor, Wooden Center West
- CAREadvocate@caps.ucla.edu
- (310) 206-2465

You can also report sexual violence or sexual harassment directly to the University’s Title IX Coordinator:
- Kathleen Salvatry
- 2241 Murphy Hall
- titleix@conet.ucla.edu
- (310) 206-3417