

STAT 410 / MATH 464

Fall 2018

Statistics and Probability II

1GR, 1UG	M W F	9:00 – 9:50 a.m.	103 Transportation Building
2GR, 2UG	T R	12:30 – 1:50 p.m.	160 English Building
3GR, 3UG	T R	2:00 – 3:20 p.m.	160 English Building

Instructor: Alexey Stepanov e-mail: stepanov@illinois.edu
Office: 101-A Illini Hall phone: 265-6550

Office hours: Monday 3:00 – 4:00 p.m., Wednesday 2:30 – 3:30 p.m.,
Thursday 10:30 – 11:30 a.m. (104 Illini Hall) or by appointment.

Text: *Introduction to Mathematical Statistics*, Seventh Edition,
by Robert V. Hogg, Joseph W. McKean, Allen T. Craig.

Moment-generating functions, joint probability distributions, conditional distributions and expected values, transformations of random variables, normal sampling theory, point estimation, maximum likelihood estimators, consistent estimators, asymptotic distributions, sufficiency, confidence intervals, hypotheses testing, most powerful tests.

Examinations: There will be **two** Midterm Exams worth 100 points each given on

Exam 1: Thursday, October 11 7:00 – 8:20 p.m. 2079 Natural History Building
Exam 2: Thursday, November 15 7:00 – 8:20 p.m. 2079 Natural History Building

A comprehensive Final Exam worth 200 points given during the final exam week.

If you are unable to take an exam, you must contact the instructor in advance.
All excuses must be verifiable. The make-up exams will be given only under exceptional circumstances.

Homework: There will be **twelve** homework assignments worth 10 points each that will be given during the semester as we cover the corresponding material. The lowest two homework scores will be dropped. Homework must be turned in class or by 2:00 p.m. in Illini Hall on the date it is due. **Late homework and homework by e-mail will not be accepted.**

Homework assignments are meant to be learning experiences. You may discuss the exercises with other students in the class, but you must write-up the solutions on your own. All work leading to your homework solutions should be given.

Course Grade: The final course grade will be based on the total number of points earned by a student during the semester in

Midterm Exams	–	$2 \times 100 = 200$ points	40%
Homework	–	$10 \times 10 = 100$ points	20%
Final Exam	–	200 points	40%
Total	–	500 points	

The grading scale will be as follows:

A+	97% – 100% 485 – 500	A	93% – 96.9% 465 – 484.5	A–	90% – 92.9% 450 – 464.5
B+	87% – 89.9% 435 – 449.5	B	83% – 86.9% 415 – 434.5	B–	80% – 82.9% 400 – 414.5
C+	77% – 79.9% 385 – 399.5	C	73% – 76.9% 365 – 384.5	C–	70% – 72.9% 350 – 364.5
D+	67% – 69.9% 335 – 349.5	D	63% – 66.9% 315 – 334.5	D–	60% – 62.9% 300 – 314.5

Grades are not curved or adjusted. This is not to dishearten students, but to let them know that their grade is based on individual effort and not on comparative effort.

Academic Integrity: The official University of Illinois policy related to academic integrity can be found in Article 1, Part 4 of the Student Code. Section 1-402 in particular outlines behavior which is considered an infraction of academic integrity: http://studentcode.illinois.edu/article1_part4_1-402.html.

Safety: The university values your safety. Please read this document: <http://police.illinois.edu/dpsapp/wp-content/uploads/2017/08/syllabus-attachment.pdf> or watch this video: <http://police.illinois.edu/emergency-preparedness/run-hide-fight/>.

The instructor reserves the right to make any changes he considers academically advisable. Such changes, if any, will be announced in class. Please note that it is your responsibility to attend the class and keep track of the proceedings.