

Section 001 (MWF 10:00 – 10:50, FLMG 157)

Section 002 (MWF 2:00 – 2:50, FLMG 102)

Juan G. Restrepo

ECOT 241, MWF 11am – 12m

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Course Goals: This course will provide the student with an orderly development of the fundamental principles of probability as well as an introduction to some of its applications and a bit of its history. Specifically, we will cover the axioms of probability, counting formulas, independence and conditional probability, discrete and continuous random variables, jointly distributed random variables, expectations, laws of large numbers and the central limit theorem. Moment generating functions and the multivariate Gaussian distribution will be covered if time permits. (*Prerequisite:* Calculus III)

Text: *A First Course in Probability*, 9th ed, by Sheldon Ross.

Course webpage: Homeworks and other important information will be posted at

<https://www.colorado.edu/amath/appm-3570-applied-probability-spring-2019>

Grade Determination: There are a total of 425 points for this course. The points are distributed over two exams (100 points each), homework (100 points), and a final exam (125 points). Please note that there will be no make-up exams (final exam excepted). If you are sick for an exam, you must bring a note from your doctor verifying your illness. Your course grade will then be determined from your remaining course work.

Approximate grade lines will be

A- $\geq 90\%$ B- $\geq 80\%$ C- $\geq 70\%$ D $\geq 60\%$

In order to earn a C- or better in APPM 3570/STAT 3100, students must have an exam average of 55% or better (midterms plus final) and an overall course average of 65% or better.

Exams: There will be two evening midterm exams 5:00 – 6:30 PM on Wednesday, February 20 and Wednesday, April 10, location to be announced. Please turn in 3 bluebooks by the second week of class.

Final: The cumulative final exam is on Tuesday, May 7th, 4:30 – 6:00 PM (Section 001), in FLMG 157 (this is a 90 minute final exam).

The cumulative final exam is on Saturday, May 4th, 4:30 – 6:00 PM (Section 002), in FLMG 102 (this is a 90 minute final exam).

Homework: Homework will be due on an approximately weekly basis. **You must show all work, correct solutions without adequate justification will receive no credit.** Late homework and electronic submissions will not be accepted.

Special Accommodations: Any student eligible for and needing academic adjustments or accommodations because of a disability, religious beliefs, or athletic conflict should speak to me by the end of the second week of class.

Dropping the course: Advice from your department advisor is recommended before dropping any course. March 22 is the last day to drop a class in MyCUInfo.

Academic Honesty: Students are encouraged to work in groups and discuss problems with each other. However, all work turned in must be your own. Violation of the CU Honor Code will result in a course grade of F (see <http://www.colorado.edu/academics/honorcode/>). All grade disputes must be resolved within one week of the grade being returned to the class.

Schedule for APPM 3570/STAT 3100, Spring 2019

Week	Date	Section	#	Homework	Due
1	Mon, Jan 14	1.2,1.3	1	HW 1	Jan 23
	Wed, Jan 16	1.4	2		
	Fri, Jan 18	1.5,1.6	3		
2	Mon, Jan 21	No Class		Martin Luther King Holiday	
	Wed, Jan 23	2.1,2.2	4	HW 2	Jan 30
	Fri, Jan 25	2.3, 2.4	5		
3	Mon, Jan 28	2.5	6	HW 3	Feb 6
	Wed, Jan 30	2.5,2.7	7		
	Fri, Feb 1	3.1,3.2	8		
4	Mon, Feb 4	3.3	9	HW 4	Feb 13
	Wed, Feb 6	3.4	10		
	Fri, Feb 8	3.4	11		
5	Mon, Feb 11	3.5,4.1	12	HW 5	Not collected
	Wed, Feb 13	4.1,4.2	13		
	Fri, Feb 15	4.2,4.10	14		
6	Mon, Feb 18	4.3,4.9	15	HW 6	Feb 27
	Wed, Feb 20	Exam 1*	16		
	Fri, Feb 22	4.4,4.5	17		
7	Mon, Feb 25	4.6	18	HW 7	Mar 6
	Wed, Feb 27	4.7	19		
	Fri, Mar 1	4.8	20		
8	Mon, Mar 4	5.1	21	HW 8	Mar 13
	Wed, Mar 6	5.2,5.3	22		
	Fri, Mar 8	5.4	23		
9	Mon, Mar 11	5.4,5.5	24	HW 9	Mar 20
	Wed, Mar 13	5.5,5.7	25		
	Fri, Mar 15	5.6,5.7	26		
10	Mon, Mar 18	5.7	27	HW 10	Apr 3
	Wed, Mar 20	6.1	28		
	Fri, Mar 22	6.1,6.2	29		
11	Mar 25-29	No Class	Spring Break		
12	Mon, Apr 1	6.2	30	HW 11	Not collected
	Wed, Apr 3	6.2,6.3	31		
	Fri, Apr 5	6.3	32		
13	Mon, Apr 8	6.4	33	HW 12	Apr 17
	Wed, Apr 10	Exam 2*	34		
	Fri, Apr 12	6.4,6.5	35		
14	Mon, Apr 15	6.7	36	HW 13	Apr 24
	Wed, Apr 17	7.2	37		
	Fri, Apr 19	7.2	38		
15	Mon, Apr 22	7.2,7.4	39	HW 14	May 1
	Wed, Apr 24	7.4	40		
	Fri, Apr 26	7.5	41		
16	Mon, Apr 29	7.5	42		
	Wed, May 1	8.2,8.3	43		
	Fri, May 3	No Class			

***Exam 1 and Exam 2 will be given in the evening (see webpage)**

◆ Section 001 Final Exam - Tuesday, May 7th, 4:30 – 6:00 PM ♣

♣ Section 002 Final Exam - Sat, May 4th, 4:30 – 6:00 PM ♥

Syllabus Statements

ACCOMMODATION FOR DISABILITIES:

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at [303-492-8671](tel:303-492-8671) or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see [Temporary Medical Conditions](#) under the Students tab on the Disability Services website.

CLASSROOM BEHAVIOR:

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

HONOR CODE:

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); [303-492-5550](tel:303-492-5550)). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION:

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at [303-492-2127](tel:303-492-2127) or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

RELIGIOUS HOLIDAYS:

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please let me know of any conflicts due to religious holidays please let me know in a timely manner so that the situation can be addressed by the instructor.

See the [campus policy regarding religious observances](#) for full details.