

## STAT 3470 (20529)

### Introduction to Probability and Statistics for Engineers

Autumn 2017

#### Class Information

Meeting Time: M,W,F 3:00-3:55

Location: University Hall 014

**Instructor:** Laura Jones

**Contact Information:** jones.5810@buckeyemail.osu.edu

Please note that in order to protect your privacy all email correspondence must be done through a valid OSU name.# account.

**Office and Hours:** Cockins Hall 122 M 9:10-10:10, 12:40-1:40 W 10:20-11:20, 12:40-1:40

If these hours do not work for you, and you would like to schedule an appointment, please provide at least 24 hours of notice.

Cockins Hall 122 is a room dedicated to helping students in all 3000 level STAT courses. It is open on the following days and times:

M 9:10-6:20

T 11:30-6:20

W 10:20-11:20, 12:40-1:40, 3:00-6:20

Th 11:30-6:20

F 9:10-10:10, 11:30-1:40

**Prerequisites:** MATH 1152, 1161.xx, 1172, 1181H, 153, or 254, or equivalent, or permission of the instructor. Not open to students with credit for 3450, 3460, 427, or 428

**Course Description:** Introduction to probability, Bayes' theorem; discrete and continuous random variables, expected value, probability distributions; point and interval estimation; hypothesis tests for means and proportions; least squares regression

**Textbook:** *Probability and Statistics for Engineering and the Sciences*, 9th Edition, by Jay L. Devore. Homework will be administered through Webassign. Purchasing access to this online homework system also comes with an ebook.

**Learning Objectives:** Upon successful completion of the class, students should be able to

- understand basic concepts of statistics and probability
- critically evaluate results based on data
- effectively communicate statistical findings to others
- recognize the importance of statistical ideas and how they can be applied in the real world

**Graded Work:** Your grade will be comprised of

- 2 in-class exams (50%)
- comprehensive final exam (25%)
- homework assignments (20%)
- attendance/participation (5%)

Tentative exam dates are **Friday, October 6 and Wednesday, November 8.**

The cumulative final exam will be on **Friday, December 8, 12:00 - 1:45 p.m. in University Hall 014.**

The grading scheme is as follows:

A 93 and above	C 73-76
A- 90-92	C- 70-72
B+ 87-89	D+ 67-69
B 83-86	D 63-66
B- 80-82	D- 60-62
C+ 77-79	F below 60

**Bonus:** The opportunity to earn bonus will potentially occur daily. Notify me of any mistakes I have made, and you will be awarded with one bonus point. Bonus points can be used on any graded work but must be turned in with the assignment.

**Attendance:** Students who miss more than three classes will lose a percentage from attendance. Each additional unexcused absence will result in a loss of percentage until all 5% is gone. If you will be missing class for a legitimate reason, prior notice is needed, and only under these circumstances will late work be accepted. With regards to exams, NO make-up exams will be given. Also, it is your responsibility to obtain all the content that you missed. Please contact a classmate to achieve this.

**TopHat:** Attendance will be taken through the use of TopHat. Students must register by going to tophat.com, clicking on signup in the upper right corner, selecting “sign up as a student,” entering the code 015101, and proceed as directed. **Please be sure to register before the start of class on Monday, August 28.**

**Academic Integrity:** Collaboration is recommended, but in the end all work should be completed by you! Anyone who is caught cheating and/or plagiarizing is in violation of the University Code of Conduct and will be reported to the Committee on Academic Misconduct. Along with the report, a zero will be given for that particular assignment and possibly the course. Every student is entitled to appeal these academic sanctions.

**Special Accommodations:** The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability, please let me know immediately. You are also welcome to register with Student Life Disability Services to establish reasonable accommodations. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. (**SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.)

**Cell Phone Policy:** Cell phones are NOT to be used during class. Before class begins, please take the time to silence and put away all electronic devices. Following this policy will not only benefit yourself but also those around you. If cell phone use is an ongoing problem, students may be deducted points from their attendance/participation grade. If there is an emergency, please inform me ahead of time.

Tentative Topics to be Covered

2.1-2.5

3.1-3.4, 3.6

4.1-4.4

Exam 1

5.1-5.4

6.1

7.1-7.3

8.1-8.4

Exam 2

9.1-9.4\*

10.1-10.2

12.1-12.4

13.1,13.2,13.4\*

14.1\*

Sections with \* may not be covered in their entirety or depending on time, may not be covered at all.