# STAT 6301 PROBABILITY FOR STATISTICAL INFERENCE AUTUMN SEMESTER 2017

# Lecture: MWF 11:30AM-12:25PM in Cockins Hall 312

# Instructor:

Dena Asta Office: 317 Cockins Hall Office Hours: TTh 11:00AM-12:00PM or by appointment Email: dasta@stat.osu.edu or asta.1@osu.edu

#### Grader:

Akira Horiguchi Email: horiguchi.6@osu.edu

Prerequisites: Math 4547 or Math 548 or permission of instructor.

**Textbook:** *Mathematical Statistics and Data Analysis* (Third Edition) by John Rice. Note: The international edition has different exercise problems and is therefore not recommended.

The textbook is on reserve in the Science and Engineering Library (SEL).

Website: The course has a web page on Canvas. You will find the class schedule, homework assignments, solutions, and other course announcements on the web page. Please check it on a regular basis.

#### **Tentative Course Schedule**

Topics	Chapters	No. of Lectures
Sample space and probability	1	6
Univariate random variables	2	9
Joint distributions	3	9
Expectations and variances	4	9
Law of large numbers and central limit theorem	5	4
Normal-derived distributions	6	2

# Tentative Homework Assignment Schedule\*

HW	Due Date	Chapters Covered
1	Wednesday, September 6	1
2	Wednesday, September 13	1
3	Wednesday, September 20	2
4	Wednesday, September 27	2
5	Wednesday, October 4	2, 3
6	Wednesday, October 11	3
7	Monday, October 23	3
8	Monday, October 30	3, 4
9	Monday, November 6	4
10	Wednesday, November 15	4
11	Monday, November 27	4, 5
12	Monday, December 4	5

\*Homework assignments will be posted on the course website. The schedule and chapters covered are tentative; actual due dates will be announced in class.

# Grading

Your course grade will be based on homework assignments, two midterms, and a comprehensive final exam.

Homework	20%	(lowest grade dropped)
Midterm I	20%	tentatively on September 22 (Friday) in class
Midterm II	20%	tentatively on October 18 (Wednesday) in class
Final	40%	December 14 (Thursday) 10:00-11:45AM

**Homework:** There will be approximately weekly assignments. Homework problems and solutions will be posted on Carmen. Answers without work will not recieve full credit. No late homeworks will be accepted. Homework is due at the beginning of class.

**Exams:** No make-up exams will be given. The final exam will be cumulative, but will emphasize the more recent material. Exam rules will be announced in class.

## Academic Misconduct

Although students are encouraged to work together on assignments, each student must submit their own written work in his or her own words. Academic misconduct will not be tolerated and will be dealt with procedurally in accordance with University Rule (oaa.osu.edu/procedures).

## **Special Accommodations**

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu.