

# **PSTAT 5A – Statistics**

## **Summer 2018, Session B**

### **INSTRUCTOR**

Javier Zapata

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Office Hours: M 2.00 pm - 4.00 pm

### **TEACHING ASSISTANTS**

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### **COURSE DESCRIPTION:**

PSTAT 5A is an introductory course in probability and statistics. We will cover three main topics: basic rules of probability, descriptive statistics and statistical inference. By the end of the course students will be able to:

- Identify real life problems that can be solved using statistics and probability
- Use critical thinking and problem solving skills for questions involving random outcomes
- Compute the probability of an event using the fundamental rules of probability
- Make basic inference from data to understand the properties of a population or a random event.
- Use a simple linear regression and visualizations to understand the interaction between two variables

All material and grades will be available through Gaucho Space. You are responsible for checking this regularly.

### **REQUISITES:**

A scientific calculator for sections and the exams.

### **TEXTBOOK**

*StatClass, 2<sup>nd</sup> Edition, Revised Printing*, Dawn Holmes and Lubella Lenaburg, McGraw-Hill (2007).

### **CLASS TIME**

Lecture: MTWR 12:30 pm - 1:50 pm  
Discussion Section: TW 2:00 pm - 2:50 pm  
TW 3:00 pm - 3:50 pm  
TW 5:00 pm - 5:50 pm

**Note:** You are required to attend lectures, and your *registered* sections and labs.

## GRADING POLICY

Worksheets (30%)	Due in class (every section and lab)
In-class Midterm 1 (20%)	Thursday August 16 <sup>th</sup> , 2018
In-class Midterm 2 (20%)	Thursday August 30 <sup>th</sup> , 2018
In-class Final (30%)	Thursday September 13 <sup>th</sup> , 2018

### Notes:

- There are **NO make-ups for missed worksheets, midterms or exams**. You are responsible for ensuring that you are available on all exam dates as well as your scheduled section and lab times.
- The midterms are not cumulative, but the final exam is cumulative.
- Grades will be available through Gaucho Space. You are responsible for checking your own grades and bringing any questions to your TA.

WEEKLY SCHEDULE		
Weeks	Dates	Plan
7	Aug 6 - Aug 9	Unit 1: Probability Unit 2: Discrete Probability Distributions
8	Aug 13 - Aug 16	Unit 3: The Binomial Distribution <b>MIDTERM 1 ON THURSDAY AUG 16<sup>TH</sup></b>
9	Aug 20 - Aug 23	Unit 4: Continuous Distributions Unit 5: Sample Statistics
10	Aug 27 - Aug 30	Unit 6: Inference on a Sample Mean <b>MIDTERM 2 ON THURSDAY AUG 30<sup>TH</sup></b>
11	Sep 4 - Sep 6	Unit 7: Inference on a Sample Proportion Unit 8: Inference on Two Sample Proportions
12	Sep 10 - Sep 13	Unit 9: Correlation between Two Variables Unit 10: Simple Linear Regression <b>FINAL EXAM ON THURSDAY SEP 13<sup>TH</sup></b>
<b>Note:</b> <ul style="list-style-type: none"><li>• This syllabus is subject to change in order to meet the needs of the course as it progresses.</li></ul>		

## ACADEMIC HONESTY

The exams are meant to reflect your knowledge and therefore, I expect it to be 100% your work. Any collaboration, form of communication or form of inspiration is strictly forbidden for the exam.

We expect all students at UCSB to maintain the integrity of the academic community. We will take serious steps to detect cheating, and any students breaking the rules will fail the class and be reported to the appropriate University authorities. Fairness is of paramount importance in an academic environment.

*"Cheating, plagiarism, and collusion in dishonest activities are serious acts which erode the University's educational and research roles and cheapen the learning experience as well as the value of*

*one's degree. This is true for offenders as well as the entire community. It is expected that all UCSB students will support the ideal of academic integrity and that they will be responsible for the integrity of their work. Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts unless otherwise permitted by an instructor. It is also the responsibility of each student to know the campus rules regarding academic misconduct—ignorance is not an excuse.”* ([from UCSB's Academic Integrity](#))

## **SPECIAL ACCOMMODATION FOR STUDENTS WITH DISABILITIES**

Students with disabilities may request academic accommodations for exams online through the UCSB Disabled Students Program at <http://dsp.sa.ucsb.edu/>. Please make requests for exam accommodations through the online system as early in the quarter as possible to ensure proper arrangements.

## **LECTURE AND COURSE MATERIAL RESTRICTIONS (wording from UCSB Academic Senate)**

All course materials (class lectures and discussions, handouts, examinations, web materials) and the intellectual content of the course itself are protected by United States Federal Copyright Law, the California Civil Code. The UC Policy 102.23 expressly prohibits students (and all other persons) from recording lectures or discussions and from distributing or selling lectures notes and all other course materials without the prior written permission of the instructor (See <http://policy.ucop.edu/doc/2710530/PACAOS-100>). Students are permitted to make notes solely for their own private educational use. Exceptions to accommodate students with disabilities may be granted with appropriate documentation. To be clear, in this class students are forbidden from completing study guides and selling them to any person or organization.

## **CAMPUS LEARNING ASSISTANT SERVICES (CLAS)**

If you need extra help with the class beyond office hours, try contacting CLAS (<http://clas.sa.ucsb.edu/>). For Summer Session B, they have set up the following time slots:

MW 9:30 - 10:45 at Student Resource Building (SRB) 3276

MW 11:00 - 12:15 at Student Resource Building (SRB) 3276

Students may sign up either online (<http://clas.sa.ucsb.edu/>) or in the CLAS office (which is right next door to SRB 3276).