

Introduction to Statistical Computing in Clinical Research

BIOSTAT 212, Summer 2020



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Course Objectives

Foundations of clinical research

- Organization and workflow
- Reproducible research
- Visualizing and presenting results

Course Objectives

Using STATA for

- Data management
- Basic statistical and epidemiologic analysis
- Reproducible reports
- Publication quality tables and figures

7 Lectures

- Tuesdays 1:15 – 2:15 pm (all times in PDT)

7 Computer labs

- Tuesdays 2:30 – 4:00 pm - OR -
- Wednesdays 6:00 – 7:30 pm

5 Assignments

- 4 shorter assignments (12.5%)
- 1 double assignment/midterm (25%) – **Due August 25th**

Final project (25%)

Logistics

Office Hours

Fridays 8:30 – 10:00 am PDT via Zoom
Link will be posted on the CLE

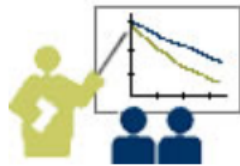
Course Website

- <https://courses.ucsf.edu/course/view.php?id=7514>
- Pre-recorded lectures
 - Available typically ~ 1 week in advance
 - Any LIVE sessions (including labs & office hours) will NOT be recorded!
- Resources on the course website
 - Stata commands
 - External resources/cheat sheets

BIOSTAT 212: Introduction to Statistical Computing in Clinical Research (Summer 2019)

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Introduction to Statistical Computing in Clinical Research (BIOSTAT 212)

BIOSTAT 212 Summer 2019 (1 unit)

Department of Epidemiology and Biostatistics

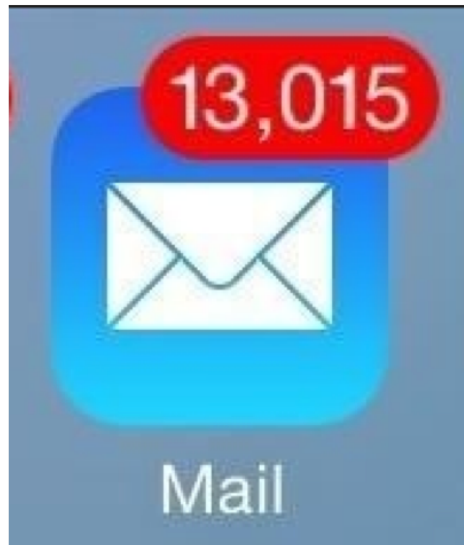
Course Director: Megha Mehrotra, MPH, PhD(c)

Teaching Assistants: Christine Anastasiou; Foram Choksi; Manasi Deshpandey; Mitzi Hawkins; Elizabeth Lancaster



BIOSTAT 212 Forum
(Registered Students Only)

POST QUESTIONS HERE!!!



But, I hate spam...

Settings for forum preferences and notification preferences:

- <https://ucsflibrary.zendesk.com/hc/en-us/articles/360020570094-View-and-Edit-CLE-Preferences>



To pass the class:

- Turn in all 5 assignments, even if late
- Satisfactory final project
- Attendance is NOT required (but highly encouraged!)

Grading

- Letter grades: Standard cutoffs

• 90-100%	A
• 80-89%	B
• 70-79%	C
• 60-69%	D
• <60% or Course Requirements not met:	F

- Satisfactory/Unsatisfactory

• >80%	Satisfactory
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- **Late assignments/finals will receive a maximum of half credit**

- No attendance requirement, but please attend if you can!

- TICR Grading policy

- http://www.epibiostat.ucsf.edu/courses/masters/grading_policy.html
- Note that the epibiostat.ucsf.edu and ticr.ucsf.edu sites are still down as of 7/20/20 – please contact Clair Dunne (Clair.Dunne@ucsf.edu) if any questions

Lecture Topics

- 1) Introduction to Statistical Computing
- 2) Data Exploration + Project Organization
- 3) Data Management and Cleaning Part 1
- 4) Data Cleaning Part 2
- 5) Data Visualization
- 6) Basic Commands for Statistics + Tables
- 7) Intro to Epi Concepts + Reproducible Documents

Computer labs

- Mini quiz on CLE (to get access to HW assignment)
- Time to work on your assignments
- Time to ask questions and get help



- **Preferred** that you have STATA 16, will support STATA 15 as well
- Can access STATA via MyResearch if necessary (can be unstable, setup is tricky for Mac users)
- IC okay for this course, but limited memory for real projects
- Recommend SE
- <https://www.stata.com/order/new/edu/gradplans/student-pricing/>
- <https://it.ucsf.edu/directory/team/it-service-desk>
- **Please be ready to use STATA for the first lab session!**

Assignments

- **5** Assignments
 - One assignment is a double assignment—worth the same as the final
- **Due** 1 week after assigned
 - Please upload **by 1:00 PM** on the due date
- Assignments turned in late will receive only half credit
- ALL assignments must be turned in to pass the class
- OK to work on your assignments with classmates but please turn in your own work

Final Exam

- Due September 15th (1 week after the last class)
- Will have 2 weeks to work on it

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