MATH 183: STATISTICAL METHODS

EDDIE AAMARI, DEPARTMENT OF MATHEMATICS, UCSD, FALL 2017

Instructor.
Professor: Eddie Aamari
Email: eaamari@ucsd.edu
Office: AP&M 5880A
Office Hours: Mond 2pm-3pm, Wed 2pm-3pm

Lectures. Mon Wed Fri, 12:00pm-12:50pm, Center Hall, room 115.


Content. The lectures will cover Chapters 1 to 7 of the textbook.
- Introduction to data
- Introduction to probability:
  - Discrete and continuous random variables
  - Binomial, Poisson and Gaussian distributions
  - Central limit theorem
- Data analysis and inferential statistics:
  - Graphical techniques
  - Confidence intervals, hypothesis testing
  - Curve fitting (regression)

Teaching Assistants.

<table>
<thead>
<tr>
<th>Sections</th>
<th>Name</th>
<th>Email</th>
<th>Office Hours</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01,A02</td>
<td>Vysyaraju, Amarnath</td>
<td><a href="mailto:avysyara@ucsd.edu">avysyara@ucsd.edu</a></td>
<td>Tues 12:30pm-2:30pm</td>
<td>AP&amp;M 5801</td>
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<tr>
<td></td>
<td></td>
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<td>Thur 12:30pm-2:30pm</td>
<td>AP&amp;M 5801</td>
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<tr>
<td>A03,A04</td>
<td>Chen, He</td>
<td><a href="mailto:hec064@ucsd.edu">hec064@ucsd.edu</a></td>
<td>Tues 2:30pm-4:30pm</td>
<td>AP&amp;M 6486</td>
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<td>Thur 2:30pm-4:30pm</td>
<td>AP&amp;M 6486</td>
</tr>
<tr>
<td>A05,A06</td>
<td>Karlapati, Vis</td>
<td><a href="mailto:vkarlapa@ucsd.edu">vkarlapa@ucsd.edu</a></td>
<td>Mon 1pm-3pm</td>
<td>MAYER 5722</td>
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<tr>
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<td></td>
<td>Tues 5pm-7pm</td>
<td>AP&amp;M 7218</td>
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Course Webpage. All the lecture notes and class informations (homework, due dates, solutions) will be available on instructor’s webpage.

Homework. Homework is a very important part of the course and you should work carefully on every assignment and try your best to complete every problem. The homework assignments will be announced on the course webpage and should be completed by the the indicated due date.
- Homework is due weekly on Friday’s lecture.
- Late assignments will not be accepted.
- Your worst homework grade will be dropped.
- Randomly selected problems on the assignment will be graded.

To assist your grader, you should keep all problems in the same order as the assignment list. If a problem is omitted, it should still appear in the correct order. All work must be on full-sized notebook paper and all pages must be stapled together.

- The upper right corner of each assignment must include:
  - Your full name (last name first)
  - Your PID
  - Your discussion section (A01, A02, etc.)
  - Homework assignment number

Homework will be handed back in your discussion section.

- No homework re-grading will be allowed after the section ends. This means that if you come back after you went out the room, your grade is fixed and your homework will not be regraded. Complaints/reclamation during the section will be considered with concern.

**Exams.** There will be two midterms and one final exam:

- **Midterm I** 50mn (Friday 10/20, 12pm-12:50pm)
- **Midterm II** 50mn (Wednesday 11/08, 12pm-12:50pm)
- **Final** 3h (Thursday 12/14, 11:30am-2:29pm)

**Grading.** Your average in this class will be determined as follows.

\[
\text{Formula 1:} \quad \begin{align*}
20\% & \quad \text{Homework} \\
20\% & \quad \text{Midterm Exam 1} \\
20\% & \quad \text{Midterm Exam 2} \\
40\% & \quad \text{Final Exam}
\end{align*}
\]

\[
\text{Formula 2:} \quad \begin{align*}
20\% & \quad \text{Homework} \\
20\% & \quad \text{Best Midterm Exam} \\
60\% & \quad \text{Final Exam}
\end{align*}
\]

Whichever formula gives you the better result will be used.

Your worst homework grade will be dropped for computing your final *Homework* score.

The grading scheme will be curved and scaled to the best student in class.

**Academic Integrity.** Group work and discussions are allowed and encouraged in this course, but copying or letting others copy your work is plagiarism. Cases of academic dishonesty will be reported to the Academic Integrity Office. Penalties for violating the policy vary depending on the circumstances but can include failure in the course or suspension from the university. UCSD’s integrity policy can be found here.