MATH 040 - Probability and Statistics
Course Information and Syllabus
Summer 2020

Instructor
Ines Pancorbo
Email: ip221@georgetown.edu
Office Hours: TBA

Lectures
Monday – Thursdays 3:00 PM – 5:40 PM Intercultural Center 204

Class time will consist of a combination of lecture, discussion, question and answer, problem solving and computer work using a statistical software package. Details will be announced in class and posted on Canvas.

Course Overview
The primary objective of this beginning course in statistics is to have students learn and understand basic statistical concepts. The emphasis will be on the following topics:

- Data exploration and graphical techniques
  - Descriptive statistics
  - Measures of center and spread
  - Graphical display
- Relationship between two variables
  - Contingency tables
  - Correlation
  - Linear and logistic regression
- Probability theory
- Sampling methods
- Random variables and probability distributions
- Statistical inference
  - Interval estimation
  - Hypothesis testing
- Comparing two groups
  - Comparing two means (independent samples; matched pairs)
  - Comparing two proportions
Textbook

Introduction to the Practice of Statistics 8th edition and LaunchPad (See announcements on Canvas for enrollment instruction details)

Calculator

Models from the TI-83 or TI-84 family will work fine. You will mainly use them for exams.

Prerequisites

See course catalog

Homework Assignments

There will be regular homework assignments. Late homework submissions will receive a score of zero points!

We will use a technology-based assessment tool for the course.

Class Participation

You are required to attend all lectures. 10% of your grade will depend on your attendance and participation. You are allowed one unexcused absence.

Honor Code

Remember that your work MUST BE YOUR OWN. Plagiarism and cheating will be dealt with to the full extent allowed under Georgetown policies.

Grading

There will be two midterm exams and a cumulative final exam.

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<tbody>
<tr>
<td>Homework average</td>
<td>15%</td>
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<tr>
<td>Attendance (one unexcused absence is allowed)</td>
<td>10%</td>
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<tr>
<td>2 midterm exams</td>
<td>20% each</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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Examinations will be closed book and closed notes; however, you may use one 8 1/2” by 11” sheet of paper (one-sided for the midterms and two-sided for the final exam) with whatever formulas, facts or explanations you find helpful. You will be required to hand in your formula sheet with your exam. You will be required to bring your own calculator.
No make-up examinations will be given. A student who misses an examination because of a medical reason must provide documented evidence of serious medical incapacitation. Other reasons for missing an examination must be discussed with me BEFORE the day of the examination. Each case will be considered on an individual basis.

A student who misses an examination without a valid excuse will receive a zero grade for that examination.

Once your course final score is calculated, letter grades will be assigned as follows:

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<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
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<td>A</td>
<td>[93 – 100]</td>
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<tr>
<td>A-</td>
<td>[90 – 93]</td>
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<td>B+</td>
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<td>B</td>
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<td>B-</td>
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<td>C+</td>
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<td>D</td>
<td>[63 – 67]</td>
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<td>D-</td>
<td>[60 – 63]</td>
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<td>F</td>
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