

# STAT 1152: Introduction to Mathematical Statistics

## Spring 2023

**Lecture Hours:** M/W 1:30 PM – 2:45 PM, 5401 Wesley W Posvar Hall

**Instructor:** Junshu Bao [Email: [jub69@pitt.edu](mailto:jub69@pitt.edu)]  
Office Hours: Tuesdays 11AM –12 PM; Wednesdays 10-11 AM  
Zoom link: <https://pitt.zoom.us/j/7550746319>

**TA:** Yuqiao Shao [E-mail: [yus149@pitt.edu](mailto:yus149@pitt.edu)]  
Office Hours: TBD  
Zoom link: TBD

### **Textbook**

Miller and Miller, John E. Freund's Mathematical Statistics with Applications, Eighth Edition, Pearson Prentice Hall, NJ (ISBN: 978-0134995373)

### **Course Description**

This course is continued from STAT1151, "Introduction to Probability". It introduces the elementary concepts of statistical inference, which are essential in appreciation of advanced statistical methods. A brief review of probability theory will be provided in the beginning. Topics include sampling distributions, point and interval estimation, hypothesis testing, regression, and analysis of variance.

**Prerequisite:** Calculus (Differentiation and Integration) and STAT 1151 Introduction to Probability.

### **Canvas**

We will be using Canvas as the learning management system (LMS) for this course. You should visit Canvas (<http://canvas.pitt.edu>) at least once a week. Here you will find all relevant course material.

### **Grades**

Grade for this course will be calculated according to the following breakdown.

|                             |     |
|-----------------------------|-----|
| <b>Homework assignments</b> | 50% |
| <b>Midterm Exam</b>         | 20% |
| <b>Final Exam</b>           | 30% |

### **Homework Assignments**

9 homework assignments will be posted on Canvas.

### **Rules:**

- **All assignments should be your individual work;** otherwise, points will be deducted.
- **Late homework will not be accepted.**
- Your homework should be neat and well-organized.

### **Examinations**

There are two exams (one midterm and one final). All exams are required and there will be no make-up exams. Missed exams will receive a grade of zero.

**Final Exam:** Date and Time TBD

**Academic Integrity**

Students in this course are expected to comply with the University of Pittsburgh's Academic Integrity policy, which can be found at <http://www.as.pitt.edu//fac/policies/academic-integrity>. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy.

**Disability Accommodations**

Students with documented disabilities are entitled to reasonable accommodations if necessary. If you have a disability that requires special accommodations, please contact Disability Resources and Services in 140 William Pitt Union no later than the second week of the semester. Their website is <http://www.drs.pitt.edu/> and their phone number is 412-648-7890. They will verify your disability and determine reasonable accommodations for this course.

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**Course Grades:**

|    |           |
|----|-----------|
| A+ | ≥ 97%     |
| A  | 93–< 97%  |
| A- | 90– < 93% |
| B+ | 87–< 90%  |
| B  | 83–< 87%  |
| B- | 80–< 83%  |
|    | etc...    |