

Mathematics 324
Applied Nonparametric Statistics, Spring 2024
Monday, Wednesday, Friday, 12:40 PM–1:30 PM, Roop G010
Instructor: Dr. Steven Garren

I. Prerequisite: MATH 220, 229, or 318.

II. Instructor's office information

email: garrenst@jmu.edu
web-site: <http://educ.jmu.edu/~garrenst>
office hours: Email (Email me your .html with specific questions.)
Monday, Wednesday, Friday, 10:10–11:10 AM, Zoom (arrive by 10:20 AM)
Thursday & Thursday, 1:00 PM–2:00 PM, Zoom (arrive by 1:10 PM)
Instructor usually closes Zoom if no students are present after 10 minutes.
The Zoom link for office hours is
<https://jmu-edu.zoom.us/j/9387584142?pwd=RE8yVThsMUMvTWthalBKWnRwWDVPdz09>
but differs from the Zoom link for lectures.
Instructor typically meets with students one at a time.

III. Recommended textbook

James J. Higgins (2004), *Introduction to Modern Nonparametric Statistics*

IV. Course objectives

- Methods of analyzing data from non-normal populations including binomial tests, contingency tables, use of ranks, Kolmogorov-Smirnov type statistics and selected topics.
- *R* (<http://www.r-project.org>) or *Rstudio* (<http://www.rstudio.com>) is the required statistical software package used in this course.

V. Grading

29% Homework
17% Exam I: Friday, February 16
17% Exam II: Friday, March 22
17% Exam III: Friday, April 19
20% Final Exam: Wednesday, May 8, 10:30 AM – 12:30 PM

A. Homework

- Homework exercises are listed on my web-site.
- Students are permitted to work together on homework, without directly copying other students' work. It is unacceptable for two or more students to turn in the same homework based on electronic copies, in part or in full. Each student must fully type his/her own homework. Hence, students may NOT turn in homework typed partially or fully by another individual. Furthermore, do NOT allow any other student to have electronic access to your homework, in part or in full.
- All homework scores count toward one's final grade; i.e., no scores are dropped.
- Homework will be due at **noon**, typically on a Tuesday, Thursday, or Sunday.
- Most homework sets are assigned six days prior to the deadline.
- **START EARLY** on homeworks! **NEVER PROCRASTINATE**, noting that you might get **sick**, have a **family emergency**, or have computer problems.
- No late homeworks will be accepted.
- Homework must be submitted electronically on Canvas as an .html file from R Markdown.

B. Exams

- Exams are closed book and closed notes.
- Exams must be submitted electronically on Canvas as an .html file from R Markdown.
- A five-point penalty is assessed on any late exam (even less than one second late), and an additional five-point penalty is assessed for each additional minute late.
- The final exam is cumulative.
- Most all of the weighting of the exams will come from modifications to the homework problems and in-class examples.
- During exams, no hats, no hoods, and no earphones may be worn; no cell phones, no iWatches, no FitBits, etc., may be used.
- If an exam is *curved*, then only students who did not take a bathroom break (or water break, etc.) will receive the *curve*.
- Display your nameplate during the entire exam.

VI. Miscellaneous

- Free textbooks on R are shown on my website.
- Please avoid bathroom breaks or exiting the classroom early, since such behavior is disruptive and distracting to the instructor.
- Class attendance is optional. Your grade will not be raised or lowered based on your class attendance.
- For your convenience, all lectures will be available synchronously and asynchronously on Zoom. To access these live or recorded lectures, go to Canvas and click *Zoom* in the left-hand sidebar. Recorded lectures are available under *Cloud Recordings*. You may view the passcode by clicking the icon of a human eye, or you may copy the passcode by clicking the icon to the right of the human eye. Then, click the arrow to play the video. However, the instructor does NOT re-record lectures which may get destroyed due to technology failure or even the instructor's error.
- Calculators are NOT allowed for exams or required homework problems.
- Cell phones (and other portable electronic devices, except laptop computers) must be completely **INVISIBLE** to yourselves and the instructor during class.
- Using a computer for reasons unrelated to MATH 324 during class will result in the reduction of the student's final grade.
- The honor code of the university will be strictly enforced.

VII. Grading scheme

| | | | |
|----|-------|----|-------|
| A | 92.5% | to | 100% |
| A- | 89.5% | to | 92.5% |
| B+ | 86.5% | to | 89.5% |
| B | 82.5% | to | 86.5% |
| B- | 79.5% | to | 82.5% |
| C+ | 76.5% | to | 79.5% |
| C | 72.5% | to | 76.5% |
| C- | 69.5% | to | 72.5% |
| D+ | 66.5% | to | 69.5% |
| D | 62.5% | to | 66.5% |
| D- | 59.5% | to | 62.5% |
| F | 0% | to | 59.5% |