

COURSE AND CONTACT INFORMATION

- Course: STAT6210 / Data Analysis
- Semester: Spring 2023
- Time: Monday, 12:45am-3:15pm
- Location: Duques, 361

INSTRUCTOR

- Name: Qing Pan, Ph.D.
- Campus Address: 801 21st St., N.W. / Rome Hall 752
- Phone: 202-994-6359
- E-mail: qpan@gwu.edu
- Office hours: Monday 10:30-12:30 (Please email ahead to make an appointment)

TEACHING ASSISTANT

TA: Jilei Lin (jileil2@gwmail.gwu.edu)
Office hour: TBA (Please email ahead)

COURSE DESCRIPTION

This course will review statistical principles of data analysis using computerized statistical analysis procedures provided by the Statistical Analysis System (SAS) and python. Topics include: linear and multiple regression, analysis of contingency tables and categorical data, logistic regression, generalized linear models, clustering, SVM and other traditional statistical methods.

COURSE PREREQUISITES

- STAT2118 or equivalent
- STAT4157/6201 or equivalent
- Proficiency in SAS or R or Python

TEXTS

- Required: None
- Recommended
 - Der, G and Everitt, B.S. (2006) Statistical analysis of medical data using SAS
- Additional course material will be provided by the instructor

LEARNING OUTCOMES:

After completing this course, students will be able to:

- Explore different types of data
- Perform statistical analysis
- Report analysis results

GRADING

- Homework (7 assignments): 40%, work independently
- Quiz (3 in-class tests): 10%, materials in the previous lectures

- Final presentation: 10%, work independently
- Final project: 40%, work independently

EXPECTED HOURS: 2.5 class time + 6 independent study per week

NOTE: IN ACCORD WITH UNIVERSITY POLICY, THE FINAL EXAM WILL BE GIVEN DURING THE FINAL EXAM PERIOD AND NOT THE LAST WEEK OF THE SEMESTER

CLASS POLICIES

- Regular class attendance
- Zoom link and/or lecture recording is available for people with doctor's notes upon request before class time
- No late homework or project (penalty apply)
 - Except under extraordinary circumstances, in which a written request and related documentation must be submitted as early as possible
- Religious holidays will be accommodated
- University policies on teaching are available at <http://www.gwu.edu/~academic/Teaching/main.htm>

ACADEMIC INTEGRITY

I personally support the GW Code of Academic Integrity. It states: "Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information." For the remainder of the code, see:

<http://www.gwu.edu/~ntegrity/code.html>

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM

- *DISABILITY SUPPORT SERVICES (DSS)*

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: <http://gwired.gwu.edu/dss/>

- *UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300*

The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:

- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals

<http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

SECURITY

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.