

SYLLABUS STAT 3119 ANOVA

COURSE AND CONTACT INFORMATION

Course: STAT 3119 Analysis of Variance

Semester: Fall 2019 (08/26/19 - 12/09/19)

Time: **Tues** 6:10-7:50 pm (lecture); **Thurs** 6:10-7:00 (lecture), 7:05-7:55 (discussion, Q & A)

Location: Gelman Library Room #608

INSTRUCTOR

Name: Xin Tian

E-mail: xtian@gwu.edu

Office hours: Immediately after the lecture on Tuesday and Thursday.

COURSE DESCRIPTION

Statistical foundations; Introduction to the design of experiments and analysis of variance; randomized block, factorial, Latin square designs, and analysis of covariance.

COURSE PREREQUISITE(S)

STAT 2118. Regression Analysis

Course Homepage: <http://blackboard.gwu.edu>

LEARNING OUTCOMES:

As a result of completing this course, you will be able to:

1. Learn the main methods of experiment design
2. Design your own experiment to gather data to answer your research questions
3. Apply the appropriate models and techniques to analyze and interpret experiment data

Textbook:

- 1) **Applied Linear Statistical Models (McGraw-Hill/Irwin; 5th Edition),**

E-book edition to order below:

<https://create.mheducation.com/shop/#/catalog/details/?isbn=9781307495218>

by Michael Kutner, Christopher Nachtsheim, John Neter, William Li

Or print copy: 978-0073108742

- 2) **Weekly Lecture notes:** <https://github.com/npmladabook/Stat3119>

Average minimum amount of out-of-class or independent learning expected per week:

In a 15-week semester, including exam week, students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction, for a minimum total of 2.5 hours a week. **A 3-credit course should include 2.5 hours of direct instruction and a minimum of 5 hours of independent learning or 7.5 hours per week.** More information about GW's credit hour policy can be found at: provost.gwu.edu/policies-forms (webpage); or <https://provost.gwu.edu/files/downloads/Resources/Assignment-Credit-Hours-7-2016.pdf> (form)

NOTE: In accordance with university policy, the final exam will be given during the final exam period and not the last week of the semester. For details and complete policy, see: provost.gwu.edu/administration-final-examinations-during-examination-period

GRADING:

- Homework, class participation/attendance, quiz (20%),
- Midterm exam (30%),
- Final exam (40%);
- Project (10%)

CLASS POLICIES

- No smart phone use is allowed in the classroom.
- Any planned coming late or leaving early to/from the class must be discussed prior to the planned schedule.
- There will be **NO** make-up quizzes/exams.

University policy on observance of religious holidays

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.

Academic integrity code

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 details and complete code, see: studentconduct.gwu.edu/code-academic-integrity

Safety and 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.

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 Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information see: disabilitysupport.gwu.edu/

Mental Health Services 202-994-5300

The University's Mental Health Services 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. For additional information see: counselingcenter.gwu.edu/

Academic Calendar: Fall 2019: <https://www.gwu.edu/academic-calendar>

***Disclaimer:** “This course materials reflect the views of the presenter (Dr. Xin Tian) and do not represent the views of the National Heart, Lung, and Blood Institute, or the National Institutes of Health.*