SIADS 631 Syllabus – W24

Course Overview and Prerequisites

This course introduces experiment design for laboratory and field experiments. We will discuss the logic of experimentation, and the ways in which experimentation has been -- and could be -- used to investigate social and technological phenomena. Students will learn how to design experiments and analyze experimental data. Students should have completed at least one undergraduate statistics class at the level of Stats 250.

Instructor and Course Assistants

- Instructor: Yan Chen - yanchen@umich.edu Opens in a new tab
- Course Lecturers: Alex McLeod - mcleodal@umich.edu; Opens in a new tab Mohamed Abbadi - meabbadi@umich.edu Opens in a new tab

Contacting instructor and course assistants:

Course channel in Slack (preferred) - siads631_wi24_003 (12-24 hour response time)

Email - see above (24-48 hour response time)

Textbooks

1. **Required:** Running randomized evaluations: a practical guide / Rachel Glennerster and Kudzai Takavarasha. See the book's website for purchasing options. Opens in a new tab This book is also available through the University of Michigan Library Opens in a new tab (restricted to one concurrent user). This book is at the right technical level for our class.
2. **Optional:** Field Experiments: Design, Analysis, and Interpretation /Alan S. Gerber and Donald P. Green. See the book's website for additional resources. Opens in a new tab **Note:** This is a technically more difficult and more precise book. It is listed here for those who would like to learn the material in greater depth.

Technology Requirements (unique to this course)

None

Accessibility

Screen reader configuration for Jupyter Notebook Content Opens in a new tab

Learning Outcomes

1. Use experiment as a method for causal inference.
2. When designing experiments, know when to use blocking versus clustering for random assignment and subsequent data analysis.
3. When designing an experiment, know basis power calculation.
4. When implementing an experiment, know how to handle spillovers and non-compliance; know how to correct for multiple testing.
5. Develop awareness of the areas of applications for laboratory and field experiments -- experiments as measurement of individual preferences, as policy interventions, as evaluation method.

Course Schedule

This course begins on **Tuesday, March 5, 2024** and ends on **Monday, April 1, 2024**.

Weekly **MobLab Activities** will be due on **Mondays at 11:59 pm** (time zone = Ann Arbor, Michigan - Eastern Time).

Weekly **Quizzes** and **Programming Assignments** will be due on **Mondays at 11:59 pm** (time zone = Ann Arbor, Michigan - Eastern Time). You can submit your office hours questions here in this form.

Schedule of Weekly Office Hours via Zoom (time zone = Ann Arbor, Michigan - Eastern Time):

- **Yan Chen**: Thursday from 7 - 8 PM
- **Mohamed Abbadi:** Sunday from 11 AM - 12 PM
- **Alex McLeod**: Monday from 9 - 10 AM
- Please use this form to submit questions prior to office hours Opens in a new tab

Assignments and Percentage of Final Grade

Course Assignment	Percentage of Final Grade
Week 1 Activity - MobLab	1%
Week 1 Quiz	10%
Week 1 Assignment	14%
Week 2 Activity - MobLab	1%
Week 2 Quiz	10%
Week 2 Assignment	14%
Week 3 Activity - MobLab	1%
Week 3 Quiz	10%

Course Assignment	Percentage of Final Grade
Week 3 Assignment	14%
Week 4 Activity - MobLab	1%
Week 4 Quiz	10%
Week 4 Assignment	14%
	100%

Note: All assignments are required to earn credit for this course.

Letter Grades, Course Grades, and Late Submission Policy

Refer to the Grades and Grading Policies section of the UMSI Student Handbook Opens in a new tab (access to Student Orientation course required)

The course grade scale is as follows:

Letter Grade	Percentage
A	[95-100]
A-	[90-95)
B+	[85-90)
B	[80-85)
B-	[75-80)
C+	[70-75)
C	[65-70)
C-	[60-65)
D+	[55-60)
D	[50-55)
D-	[45-50)
E	Below 45

For this course, the late-submission penalty for quizzes and assignments is a 15% daily-recurring reduction in grade for the first three days after the submission deadline. You will receive a zero if your assignment is turned in four or more days late. Students have one free pass to submit one

week's assessments (quizzes and assignments) three days late. Students don't need to explain their circumstances but need to report their late submission by DMing Instructional team. Instructional team will adjust the late grade for one week's assessments.

The late-submission penalty for MobLab Activities is that there is no penalty if you submit the activity before the grading has begun but you will receive a zero if you submit the activity after the grading has begun. Grading may begin at any point after the deadline. The free pass does not apply to MobLab Activities, and there will be no extensions for MobLab Activities.

Academic Integrity / Code of Conduct

Refer to the Academic and Professional Integrity Opens in a new tab section of the UMSI Student Handbook (access to Student Orientation course required).

While we offer a number of discussion channels to support your work, if you are stuck **you may not share or receive complete solutions to the assignments.** We also encourage you to support your classmates, but again, without sharing completed code (pointing to resources, describing ideas in pseudo-code, etc. is fine).

Accommodations

Refer to the Accommodations for Students with Disabilities Opens in a new tab section of the UMSI Student Handbook.

Use the Student Application Form in Accommodate Opens in a new tab to begin the process of working with the University's Office of Services for Students with Disabilities.

Help Desk(s): How to get Help

- Degree program questions or general help - umsimadshelp@umich.edu
- Coursera's Technical Support (24/7) - https://learner.coursera.help/ Opens in a new tab

Library Access

Refer to the U-M Library's information sheet Opens in a new tab on accessing library resources from off-campus. For more information regarding library support services, please refer to the U-M Library Resources Opens in a new tab section of the UMSI Student Handbook (access to the Student Orientation course required).

Student Mental Health

Refer to the University's Resources for Stress and Mental Health website Opens in a new tab for a listing of resources for students.

Student Services

Refer to the Introduction to UMSI Student Life Opens in a new tab section of the UMSI Student Handbook (access to the Student Orientation course required).