Sociol./Urb. Std. 982

Fall 2020

Prof. John Roberts

Office Hours: By (online) appointment. E-mail: jmrob@uwm.edu

<u>Prerequisites</u>: Strong familiarity with OLS multiple regression at the level presented in Sociol. 760; satisfactory score (85%) on diagnostic test or alternative assessment.

<u>Attendance</u>: Attendance is required at all class sessions, barring an emergency of some sort that prevents it. If you have an emergency that interferes with class, an exam, or an assignment, contact me as soon as possible.

<u>Text</u>: There is no required text. I can recommend supplementary materials for the various topics to anyone who would like them.

<u>Subject</u>: 982 is a second data analysis course for graduate students in sociology and related fields. It includes various extensions of the OLS regression framework presented in Sociol. 760, as well as some other quantitative approaches that do not necessarily involve a regression-like model. (A list of topics is given below.) For many of the topics, we will examine published articles that used the technique being covered. All of the analyses discussed here can be carried out in standard statistical software (Stata, SAS, R, etc.), and software instructions will be presented along with the methods.

<u>Lab time</u>: The class schedule distinguishes between lecture and lab segments, but we will be rather flexible with that division of class time. In general we will not need as much time for software instruction as the length of the lab segment would suggest, so we will often devote extra time to the lecture portion.

<u>Paper</u>: The paper will involve data analysis using a technique (or techniques) presented in the course. The topic, data, and analytic technique(s) will be chosen by the student, but these choices must be confirmed with me at least three weeks before the paper is due. One restriction is that a paper in which the only extension of a 760-type analysis is the use of regression diagnostics is not permitted. The paper will be structured like an article in a sociology journal (with a literature review and so on). The paper will be due on Saturday, December 19.

<u>Exams</u>: Exams will take place in regular class time or as given by the University's final exam schedule. The final exam is scheduled for Tuesday, December 22.

Grading: Final grades will be calculated based on the following weighting of graded elements:

Homework 10%, Midterm quiz 26%, Final exam 32%, Paper 32%.

Topics:

- 1. Regression diagnostics
- 2. Maximum likelihood and regression for categorical and count (possibly also duration) dependent variables

- midterm quiz –

- 3. Principal components (including some background on eigenvalues/vectors)
- 4. Correspondence analysis (including a little background on the SVD)
- 5. Missing data

paper - final exam

## UNIVERSITY AND SOCIOLOGY DEPARTMENT POLICIES

The Secretary of the University maintains a web page that contains university policies that affect the instructor and the students in this course, as well as essential information specific to conduct of the course. The link to that page is: <u>https://uwm.edu/secu/wp-content/uploads/sites/122/2016/12/Syllabus-Links.pdf</u>

- <u>Students with Disabilities.</u> In the pursuit of equal access and in compliance with state and federal laws, the University is required to provide accommodations to students with documented disabilities. To learn more, please visit: <u>http://uwm.edu/arc/</u>
- <u>Religious Observances</u>. Policies regarding accommodations for absences due to religious observance are found at the following: <u>http://www4.uwm.edu/secu/docs/other/S1.5.htm</u>
- Students called to active Military Duty. Students called to active military duty. Accommodations for absences due to call-up of reserves to active military duty should be noted.
  Students: <u>http://uwm.edu/active-duty-military/</u>
  Employees: https://www.wisconsin.edu/ohrwd/download/policies/ops/bn9.pdf
- Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work. <u>https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-13.%20Incomplete%20Grades.pdf</u>
- Discriminatory Conduct. Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience and well-being of students, faculty and staff. Policies regarding discriminatory conduct can be found at: <u>https://apps.uwm.edu/secu-policies/storage/other/SAAP%205-</u> <u>1.%20Discriminatory%20Conduct%20Policy.pdf</u>
- <u>Title IX/Sexual Violence.</u> Title IX is a federal law that prohibits sex discrimination in education program or activities, and UWM policy prohibits such conduct (see Discriminatory Conduct, above). This includes sexual violence, which may include sexual harassment, sexual assault, relationship violence, and/or stalking in all educational programs and education-related areas. UWM strongly encourages its students to report any instance of sex discrimination to UWM's Title IX Coordinator (titleix@uwm.edu). Whether or not a student wishes to report an incident of sexual violence, the Title IX Coordinator can connect students to resources at UWM and/or in the community including, but not limited to, victim advocacy, medical and counseling services, and/or law enforcement. For more information, please visit: <u>https://uwm.edu/sexual-assault/</u>
- <u>Academic misconduct.</u> Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University. <u>http://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/</u>
- <u>Complaint procedures.</u> Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy. <u>https://apps.uwm.edu/secu-policies/storage/other/SAAP%205-1.%20Discriminatory%20Conduct%20Policy.pdf</u>
- <u>Grade appeal procedures</u>. A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School. <u>https://apps.uwm.edu/secupolicies/storage/other/SAAP%201-10.%20Grade%20Appeals%20by%20Students.pdf</u>
- <u>LGBT+ resources</u>. Faculty and staff can find resources to support inclusivity of students who identify as LGBT+ in the learning environment. <u>https://uwm.edu/lgbtrc/</u>
- <u>Smoke and Tobacco-Free campus</u>. UWM prohibits smoking and the use of tobacco on all campus property. <u>https://apps.uwm.edu/secu-policies/storage/other/SAAP%2010-8.%20Smoke%20and%20Tobacco-Free%20Campus%20Policy.pdf</u>
- <u>Final Examinations.</u> Information about the final exam requirement, the final exam date requirement, and make-up examinations. <u>https://apps.uwm.edu/secu-policies/storage/other/SAAP%201-9.%20Final%20Examinations.pdf</u>
- **Book Royalties.** In accord with department policy, the royalties from the sale of UWM sociology facultyauthored books to students in their classes are donated to a UWM Foundation/Sociology Account to support future awards and activities of UWM sociology students. Updated 08/2020