Office Hours: Bolton 764, T 3:30-4:30 or by 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>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, 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 Friday, December 22.

<u>Grading</u>: 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

- 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: http://www4.uwm.edu/secu/news_events/upload/Syllabus-Links.pdf

- 1. Students with disabilities. Notice to students with disabilities that special services and accommodations are provided. Information is available from the Accessibility Resource Center at http://uwm.edu/arc/
- 2. **Religious observances**. Information concerning accommodations for absences due to religious observance is available at: http://www4.uwm.edu/secu/docs/other/S1.5.htm
- 3. *Students called to active military duty.* Accommodations for absences due to call-up of reserves to active military duty is available at http://wwm.edu/active-duty-military/
- 4. *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. The policy outlining incomplete grades is available at: https://www4.uwm.edu/secu/docs/other/S 31 INCOMPLETE GRADES.pdf
- 5. *Discriminatory conduct* (such as sexual harassment). 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. Policy regarding discriminatory conduct can be found at: https://www4.uwm.edu/secu/docs/other/S 47 Discrimina duct Policy.pdf
- 6. *Academic misconduct*. 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. The policy and procedures concerning academic misconduct is available at http://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/
- 7. Complaint procedures. Students may direct complaints to the Sociology Department Chair or the Associate Dean for Social Sciences in the College of Letters & Sciences. If the complaint allegedly violates a specific university policy, it may be directed to the Sociology Department Chair, the Associate Dean for Social Sciences in the College of Letters & Sciences, or to the appropriate university office responsible for enforcing the policy. Policy may be found at: https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf
- 8. *Grade appeal procedures*. 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 College of Letters & Science or in the case of graduate students, the Graduate School. These procedures are available in writing from the sociology department chairperson or the Academic Dean of the College of Letters & Science. Procedures for undergraduate student grade appeal can be found at http://uwm.edu/letters-science/advising/answers-forms/policies/appeal-procedure-for-grades
 Procedures for graduate student grade appeal can be found at http://uwm.edu/graduateschool/academic-appeals-procedure/
- 9. *LGBT*+ *resources*. Resources to support inclusivity of students who identify as LGBT+ in the learning environment are available at http://uwm.edu/lgbtrc/
- 10. *Final examination policy*. Policies regarding final examination requirement can be found at: http://www4.uwm.edu/secu/docs/other/S22.htm
- 11. *Publication royalties*. Royalties from the sale of faculty-authored publications to students in their classes are donated to the UWM Foundation–Sociology account to support activities and awards for UWM Sociology students.