
Quantitative Methods for Non-Experimental Research
Education 795
Syllabus

Teaching Team

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Course Description

Building on the foundation developed in Educ 793, this course provides students the opportunity to advance their understanding of the core assumptions of multiple linear regression and the solutions that exist when data violate one or more of those assumptions.

Schedule



Required Readings

See the schedule of topics, readings, and assignments

Other Required Materials and Resources

You will need daily access to your U-M email account, Dropbox, and Canvas. You also will need a hand calculator or smart phone calculator app for class and lab exercises, assignments, and exams.

Grading

The components of your course grade include:

Assignment 1 Bivariate OLS Regression	10 points
Assignment 2 Nested Multiple OLS Regression	20 points
Assignment 3 Regression Diagnostics	20 points
Assignment 4 Nonlinear Models and Multiplicative Interactions	20 points
Assignment 5 Logistic Regression	20 points
Assignment 6 Missing Data	<u>10 points</u>

Total of 100 points

Course grades will be determined by the total number of points achieved, as follows:

≥ 98.00 points	A+	80.00–81.99 points	B-	62.00–67.99 points	D
92.00–97.99 points	A	78.00–79.99 points	C+	60.00–61.99 points	D-
90.00–91.99 points	A-	72.00–77.99 points	C	< 60.00 points	F
88.00–89.99 points	B+	70.00–71.99 points	C-		
82.00–87.99 points	B	68.00–69.99 points	D+		

Assignments

Six assignments will be distributed via Canvas, and completed assignments will be submitted in PDF format via Canvas. Late assignments will receive zero credit.

Selected Course Policies (a guide, not an exhaustive list)

Assigned Reading

The assigned readings are a fundamental part of this course. The lecture and lab will not serve as a complete substitute for these readings, and, hence, you will not gain all that there is to acquire from this course without completing these readings. In addition, the design and expectations of the assignments presume that you have read and understood the readings and will be graded accordingly.

Late Assignments

Late assignments will receive zero credit.

Incomplete Grades

The School of Education Incomplete Grade Policy is intended to offer a course of action for instructors and provide transparency to students around expectations when unexpected events occur. This policy permits students who have warranted need to request an incomplete (“I”) grade to allow for extended time to complete coursework within a reasonable time frame after the end of the semester.

An incomplete grade may be awarded at the discretion of the instructor. When an instructor approves a student’s request for an incomplete, the student and instructor should discuss a schedule for completing the remaining course work and submit the Incomplete Grade Form prior to the conferral of the incomplete. The Incomplete Grade Form serves as a written agreement of the work needed to complete the course and the date by which the work will be done. The form submission will be initiated by the instructor, who will list the required coursework and deadlines for completion.

Electronic Communication

The instructional team assumes that you have read any electronic communication that is sent to you within 24 hours of it being sent. You may assume the same about electronic communication that you send to a member of the instructional team. However, you should anticipate that it may be as long as 48 hours before you receive a response to your electronic communication during the course of the workweek. Response times may be longer on the weekends.

Citations and References

The APA citation format will be employed in all documents submitted in this course because it is ubiquitous (and, in many cases, required) in education research publications.

Plagiarism

Plagiarism — the intentional or unintentional use of the ideas or words of another person or organization without citing the source appropriately — will not be tolerated in this course and will result in a failing grade on the associated assignment. Please see <https://www.lib.umich.edu/academic-integrity/resources-students> for more information about plagiarism.

Retention of Documents

Graded documents that you submit in this course that are not returned to you will be retained until December 31, 2024, and then discarded.

Guidelines for Class and Lab Discussions

This classroom is inclusive of a wide range of backgrounds, experiences, perspectives, and beliefs. The teaching team is committed to ensuring that differing viewpoints are welcomed and valued here, and that everyone who wants to speak to a particular issue has the opportunity to do so in an environment of mutual respect. I ask you to join us in that commitment and to strive to uphold the goal of healthy discussion and debate without challenging any individual's right to speak. Further, I ask that you listen carefully to others, especially when you disagree, and assume that each person in this classroom is speaking in good faith and with good intentions. If you ever feel that a discussion did not meet these guidelines, or otherwise has left you with negative feelings about the classroom environment, please speak with me about it.

Accommodations for Students with Disabilities

If you think that you need accommodation for a disability, please speak with me as early as possible. Some aspects of this course may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work together with the Office of Services for Students with Disabilities (SSD) to help us determine appropriate academic accommodations. SSD (734-763-3000; www.ssd.umich.edu) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information that you provide is confidential.

Students' Rights and Responsibilities

Membership in the academic community that is the University of Michigan affords you a number of important rights, as well as a number of important responsibilities. Please see <http://www.oscr.umich.edu/statement/> for information about these rights and responsibilities.