Empirical Legal Studies

Legal 393E
University of Massachusetts Amherst
Spring 2025
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Contact Information

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Course Time: M/W/F 11:15 a.m. to 12:05 p.m.
Course Location: Machmer E-37
Office Hours: W/Th 4:00 - 5:30 p.m. ET, or by appointment through Calendly

Office Hours Location: Bartlett Hall 257 or Zoom

Course Description

From academic research on the impact of landmark court cases to the judge reading a brief loaded with social policy arguments, the study of law frequently involves empirical data. In this course, students will both learn how to digest empirical legal research and be equipped with the skills to conduct their own empirical research. Using readings and accompanying data from a variety of areas of legal studies research, the course covers topics including constructing empirical legal research questions, collecting and generating data appropriate for testing those questions, visualizing data, and conducting descriptive and inferential analyses. Students will leave the course with a firm understanding of the centrality of data in twenty-first century law.

Course Objectives

- Equip students to become knowledgeable consumers of empirical evidence, capable of understanding research across a variety of topics in legal studies.
- Provide students with the tools to design and complete basic empirical legal studies of their own, including constructing testable research questions and methods and techniques for testing their hypotheses.
- Demonstrate the importance of statistical literacy for purposes of analysis, argument, and understanding, with students capable of identifying both the strengths and weaknesses of increasingly common arguments based on empirical evidence.

- Enable students to communicate clearly and appropriately the results or shortcomings of empirical research.

Text

There is no required text for this course. We will reference the following text and associated online content in this course. Interested students might consider purchasing it, but again, this is not required:

Lee Epstein and Andrew Martin. 2014. *An Introduction to Empirical Legal Research*. Oxford University Press.

This syllabus outlines general areas of study throughout the semester, as well as listing specific reading assignments on a daily basis. It is vital that you keep current with the readings, as they will provide the basis for lectures and discussions.

Software

Students in this class will use `R` and `RStudio`. The software is free and available online; the course website includes a guide for installing both on your machine. The course assumes no familiarity with the `R` programming language. In rare cases when the local installation of `R` and `RStudio` is not possible, there are alternative online platforms operate:

1. Posit Cloud: 25 hours of computing time per month for the Free Plan.
2. Posit Cloud: can run R but is not available to edit and export code-embedded documentation using Quarto.

Flow of the Course

The course is divided into weekly learning units, each of which builds towards the successful completion of an original research project by you and members of your group. In each week, the material to read and any associated programming tutorials are listed in the order that you should do them. Each tutorial will be accompanied by a quiz that should be completed *while* finishing the tutorial.

Grading

Grades are calculated as follows:

Homeworks (30%)

Research Project (30%)

Tutorials (20%)

Research Presentation (10%)

Participation (10%)

Homework Four homework assignments will be distributed during the course of the semester. The assignments are intended to further engage students with a particular empirical question, to familiarize students with the role of data in legal studies, and to build student ability to critically assess data-centric arguments in the legal realm. Details on each assignment will be distributed during the semester. Appropriate citations should be used in accordance with university guidelines. Deviations from these policies carry a penalty of 2 letter grades for the assignment. Late submissions (turned in after 1:00 pm on the due date) are assessed a one letter grade penalty per calendar day late.

Research Project More information regarding the research project is available online. Students are expected to complete an original research project during the course of the semester. Students seeking accommodations *must notify the professor **BEFORE** the due date.* The projects will be completed in groups, with 50% of the student's grade coming from the instructor and the other 50% from peer evaluation forms to be completed by fellow group members.

Tutorials Students will be required to complete five online `R` modules that will walk them through different tasks in `R`. Students are expected to complete each and every module; modules are graded for completeness rather than having the perfect answer. For that reason, failing to complete modules will carry the penalty of forfeiting the entirety of the points available for the module. Students seeking accommodations *must notify the professor **BEFORE** the module is due.*

Participation Students are expected to participate regularly, and participation should reflect careful consideration of the topic. Participation does not need to reflect expertise; rather, students should seek to both *ask* and *answer* questions regularly and in equal proportion.

Final letter grades are assigned using the University's Plus-Minus Grading Scale according to following rubric:

A (93-100%)

A- (90-92%)

B+ (87-89%)

B (83-86%)

B- (80-82%)

C+ (77-79%)

C (73-76%)

C- (70-72%)

D (60-69%)

F (Below 60%)

Academic Honesty

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst.

Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. The procedures outlined below are intended to provide an efficient and orderly process by which action may be taken if it appears that academic dishonesty has occurred and by which students may appeal such actions.

Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent.

For more information about what constitutes academic dishonesty, please see the Dean of Students' website:
http://umass.edu/dean_students/codeofconduct/acadhonesty/

Statement on Disabilities

The University of Massachusetts Amherst is committed to making reasonable, effective and appropriate accommodations to meet the needs of students with disabilities and help create a barrier-free campus.

If you are in need of accommodation for a documented disability, register with Disability Services to have an accommodation letter sent to your faculty. It is your responsibility to initiate these services and to communicate with faculty ahead of time to manage accommodations in a timely manner. For more information, consult the Disability Services website at http://www.umass.edu/disability/.

Title IX Statement

In accordance with Title IX of the Education Amendments of 1972 that prohibits gender-based discrimination in educational settings that receive federal funds, the University of Massachusetts Amherst is committed to providing a safe learning environment for all students, free from all forms of discrimination, including sexual assault, sexual harassment, domestic violence, dating violence, stalking, and retaliation. This includes interactions in person or online through digital platforms and social media. Title IX also protects against discrimination on the basis

of pregnancy, childbirth, false pregnancy, miscarriage, abortion, or related conditions, including recovery. There are resources here on campus to support you. A summary of the available Title IX resources (confidential and non-confidential) can be found at the following link: https://www.umass.edu/titleix/resource. You do not need to make a formal report to access them. If you need immediate support, you are not alone. Free and confidential support is available 24 hours a day / 7 days a week / 365 days a year at the SASA Hotline 413-545-0800.

Other Course Policies

Name and Pronouns

Everyone has the right to be addressed and referred to by the name and pronouns that correspond to their gender identity, including the use of non-binary pronouns (such as "they/them"). Class rosters have a student's legal first name, unless they have entered a preferred/chosen first name on Spire. You may also enter your preferred pronouns on Spire (a student is not obligated to provide their pronouns, though). A student's chosen name and pronouns should be respected at all times in the classroom.

AI Tools

There are two components to this course: writing *papers* and writing *code*. Students are prohibited from using AI tools like ChatGPT to draft their papers, particularly as these papers are intended to build a student's ability to express their arguments in text. Students are allowed, however, to use ChatGPT and other AI tools for drafting R *code*, so long as students clearly identify and attribute the code from ChatGPT or similar services in-line in their submitted work.

Updates to this Syllabus

I reserve the right to change this syllabus as I see fit at any point in the semester.

Course Schedule

Daily reading assignments are listed in parentheses. Note that reading assignments are listed according to the day on which the subject matter will be discussed; they should therefore be read prior to that date.

January 31st: Introduction

Self-Introduction & Discuss syllabus
Reading: *R for Data Science*, Hadley Wickham, available here.

Lab Day(TBD): Introduction to R.
Due Friday: None.

February 3rd & 5th & 7th: Introduction (cont.) & Empirical Research

Readings: ELR, Chapter 1 & 2.

Julia Angwin, Jeff Larson, Surya Mattu, and Lauren Kirchner's article "The Legal System Uses an Algorithm to Predict if People Might Be Future Criminals. It's Biased Against Blacks" in *Mother Jones*, May 23, 2016.[LINK]

Lab Day(TBD): Survey Experiments.
Due Friday: Tutorial One.

February 10th & 12th & 14th: Measuring Up

Reading: *ELR*, Chapter 3.

Lab Day(TBD): Work on Research Project & Tutorial Two.
Due Friday: Homework One.

February 19th & 20th & 21st: Collecting & Coding Data

Note: UMass follows Monday class schedule on Thursday

Reading: *ELR*, Chapter 4.

Lab Day(TBD): Work on Research Project.
Due Friday: Tutorial Two.

February 24th & 26th & 28th: Summary Statistics

Reading: Jeffrey Rachlinski, Sheri Johnson, Andrew Wistrich, and Chris Guthrie (2009) "Does Unconscious Racial Bias Affect Trial Judges?"

Lab Day(TBD): Work on Research Project & Tutorial Three.
Due Friday: None.

March 3rd & 5th & 7th: Statistical Inference

Reading: C. Tong. 2019. "Statistical Inference Enables Bad Science; Statistical Thinking Enables Good Science." *The American Statistician*, available here.

Lab Day(TBD)
Due Friday: Homework Two and Tutorial Three.

March 10th & 12th & 14th: Modeling Data

Reading: Andrew Gelman, Jeffrey Fagan, and Alex Kiss. 2007. "An Analysis of the New York City Police Department's 'Stop-and-Frisk' Policy in the Context of Claims of Racial Bias." *Journal of the American Statistical Association* 102 (479): 813-823.

Lab Day(TBD): Work on Research Project & Tutorial Four.
Due Friday: None.

Spring Recess: March 16-23

March 24th & 26th & 28th: Catch-up and Finalizing Survey

Reading: none

Lab Day(TBD): Finalizing survey experiment.
Due Friday: Homework Three

March 31st: Communicating Data

Note: I will be traveling between April 2nd and 6th; recorded lectures will be provided; no office hours for Thursday

Reading: Chapter 28, *R for Data Science*, Hadley Wickham, available here.

Lab Day(TBD): Work on Research Project & Tutorial Five.
Due Friday: Tutorial Four.

April 7th & 9th & 11th: Research Presentation Design

Reading: Marilynn Larkin, "How to Give a Dynamic Scientific Presentation." *Elsevier Connect* [link]

Lab Day(TBD): Work on Research Presentation & Tutorial Five.
Due Friday: Tutorial Five.

April 14th & 16th & 18th: Project Work

Reading: Andrew Gelman, "The garden of forking paths: Why multiple comparisons can be a problem, even when there is no "fishing expedition" or "p-hacking" and the research hypothesis was posited ahead of time." [link]

Lab Tuesday & Thursday: Explore Results.
Due Friday: Homework Four.

April 21st & 23rd & 25th: Class Presentation

Reading: none.

Lab Tuesday & Thursday: Present Preliminary Results.

April 28th & 30th & May 2nd: Design Ideas

Reading: Brown, Andrew, Kathryn Kaiser, and David Allison. 2018. "Issues with Data and Analyses: Errors, Underlying Themes, and Potential Solutions." *PNAS* 115(11): 2563-2570.

Lab Day(TBD): Incorporate Feedback.
Due Friday: none.

May 5th & 7th: Wrapping Up

Reading: none.

Lab Day(TBD): none.
Due Friday: none.

Research Project due: May 11th.
Final Poster Presentation: TBD.