Syllabus Spring 2026	
Course Information	ECON 637: Econometrics I Location: Fairfax Campus, Horizon Hall 4008 Class time: Tuesdays 7:20-10 pm
Instructor	Professor Thomas Stratmann Email: tstratma@gmu.edu Phone: 703.993.4920 Office Hours • Tuesdays, 11 am to 12 pm, in-person Vernon Smith Hall, Room 4013, Arlington Campus or via Zoom • by appointment.
Teaching Assistant	Brigitta Jones Email: bjones65@gmu.edu Office Hours: • Tuesdays 4-5 PM, in-person Buchanan Hall D150 or via Zoom: https://gmu.zoom.us/j/98170990814 • Fridays 9-10 AM, via Zoom: https://gmu.zoom.us/j/93241320419 • by appointment
Course Description	This course will deepen your knowledge of multiple regression analysis and the modern statistical techniques required to analyze data in the social sciences. The emphasis is on empirical applications.
Course Objectives	Upon completion of the course, students will be able to: 1. Interpret statistical information and research results published in economics journals 2. Perform data analysis and statistical tests to answer research questions 3. Apply an appropriate research design to establish causality 4. Demonstrate an ability to utilize statistical software (Microsoft Excel & Stata) 5. Construct appropriate outputs based on empirical analyses
Course Methodology	The class format will combine readings, lectures, problem sets, quizzes, a paper draft, and other learning tools. Every week you will be expected to listen to the lecture, read through the posted material, read the assigned book chapters, and complete listed assignments. It is a fast-paced course where new material builds upon previous material, so you should make all effort to keep up with all the weekly tasks.
Required textbook(s) and/or materials	**Required Texts:** **Introductory Econometrics** - Edition: 8th Author: Jeffrey M. Wooldridge ISBN: 9781337558860

	Publication Date: 2020 Publisher: Cengage https://faculty.cengage.com/search?q=9780357900161 **Mostly Harmless Econometrics: An Empiricist's Companion** Authors: Joshua D. Angrist, Jorn-Steffen Pischke ISBN: 9780691120355 Publication Date: 2008 Publisher: Princeton University Press Here is a link to the book's website: https://www.mostlyharmlesseconometrics.com/ You can access the book for free through the GMU library: http://mutex.gmu.edu/login?url=http://www.degruyter.com/isbn/9781400829828 **Econometric Analysis** - Edition: 8th Author: William H. Greene ISBN: 9780134461366 Publication Date: 2018 Publisher: Pearson Greene has supplementary materials and some chapters of his book for download at https://people.stern.nyu.edu/wgreene/Text/econometricanalysis.htm All three books provide a very good discussion of issues in modern econometrics. Wooldridge is good for developing an intuition for the underlying theory, Angrist/Pischke focuses on causal inference and identification, and Greene offers a mathematical approach. Recommended Reading: Jeffrey Wooldridge's "Econometric Analysis of Cross Section and Panel Data" (MIT Press 2010) is a more advanced treatment of the analysis of microdata. It is quite useful, and I require this book in the applied micro-econometrics class I teach in Fall 2025. Another useful book is Peter Kennedy's "A Guide to Econometrics" (6th Edition), Wiley-Blackwell, 2008. I found it to be very useful as a graduate student. Other readings and materials will be made available electronically on Canvas. **Required Software:** **Stata** (Almost any version of Stata suffice for this course. For more details, see "Course-specific Hardware/Software" below) **Or R** **Or Python**
Computer Requirements	**Hardware:** You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and a fast and reliable broadband internet connection (e.g., cable, DSL). A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content, and a headset with a microphone is recommended for the best experience. Finally, you are encouraged to have a webcam. If you are considering the purchase of a new computer, please go to Patriot Tech to see recommendations. **Software:** To access Canvas: https://mymasonportal.gmu.edu/

	Online courses typically use Acrobat Reader, Flash, Java, and Windows Media Player, QuickTime, and/or Real Media Player. Your computer should be capable of running current versions of those applications. Also, make sure your computer is protected from viruses by downloading the latest version of Symantec Endpoint Protection/Anti-Virus software for free here. Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types. **Course-specific Hardware/Software:** **This course will include applied computing, using Microsoft Excel and Stata or R or Python. You will have flexibility on which programming language you use for problem sets.** Stata software is probably the most favored statistical package used by applied economists. You may utilize Stata/IC which is available through the university and for purchase. Here are some Mason links to Stata, how to access Stata on Campus and off Campus, and purchasing options. https://infoguides.gmu.edu/software/stata https://its.gmu.edu/service/virtual-computing-lab/ https://its.gmu.edu/service/virtual-private-network-vpn/ To access Stata, go to https://its.gmu.edu/service/virtual-computing-lab/. This gets you to the virtual computing lab to access Stata. If you are off-campus, you will have to use a VPN connection. Sometimes, even on campus, you'll need a VPN connection to access the virtual computing lab. For details on how to stall a VPN on your laptop or computer, go to https://its.gmu.edu/service/virtual-private-network-vpn/ Alternatively, or in addition, you can buy a six-month annual or perpetual license. You can find your options here: https://www.stata.com/order/new/edu/profplus/student-pricing/ And of those options suffice for this class. – **You are also welcome to use other statistical software.** Your instructor has no financial interest in what type of option you chose and whether you purchased this software. The book *Statistics with Stata* by Lawrence C. Hamilton might be useful for you to learn about using Stata, but this book is not required. A helpful Stata reference developed by GMU may be found here: https://infoguides.gmu.edu/software/stata . And there are many free videos online, such as on YouTube.
Course Website	Canvas will be used for this course. You can access the site at http://mymasonportal.gmu.edu. Log in and click on the "Courses" tab. You will see ECON 637. NOTE: Username and passwords are the same as your Mason email account. You must have consistent access to an internet connection to complete the assignments in this course through Canvas. Note the technology requirements for the College of Humanities and Social Sciences in your Canvas course menu—it contains details of minimum technology requirements.
Course Grading & Evaluation	Grades will be assigned as follows: A: 93.00-100%

	A-: 89.50-92.99% B+:87.00-89.49% B:83.00-86.99% B-:80.00-82.99% C+:77.00-79.99% C:73.00-76.99% C-:70.00-72.99% D:60.00-69.99% F:0-59.99%
Quizzes – 5%	There will be a few quizzes to test your knowledge.
Assignments: Problem Sets – 20%	Check Canvas frequently for updates on problem sets, lecture notes, reading assignments, announcements, etc. You may work on the problem sets in small groups. You must, however, write up your answers individually and in your own words. If you choose to work in a small group, include the names of your study group members on your problem set. Duplicate answers will not receive credit. Assignments are required to be uploaded to Canvas. Unless otherwise stated, they are due the following Tuesday, after the assignment is provided, at 11:59 PM ET. Refer to the course schedule and weekly overviews for details.
Term Paper – 20%	You are required to write a paper for this class. The paper can be short. State your hypothesis and present the results. Review articles in the AER, JPE, and QJE to learn how results are presented (tables, description of results). You will not be graded on whether you do find or do not find statistically significant results but on the clarity of exposition and the innovation of your paper relative to the existing literature on your chosen topic. By the week of the Midterm, around week 6 of this class, you must send the proposal for your paper to two other students requesting feedback. Each student will be responsible for a peer review of two proposals. Your revised paper proposal, along with a description of the data you will be using in your paper, is due the week after you receive comments from your peers. The revised proposal will count as twenty percent of your paper grade. For your paper, please review policies issued by the GMU Office of Research Assurance and Integrity, which you can find here: https://economics.gmu.edu/graduate/policies/research-integrity)
Exams – 55% (Midterm 25%, Final 30%)	There will be one midterm exam and one final exam. Both exams are closed-book exams. There will be no makeup midterm. If you miss the midterm with a valid excuse, its weight will be shifted to the final. The final exam will be cumulative and will also be a closed book exam. The midterm will be during class on Tuesday **March 3rd beginning at 7:20 pm**. The final exam is on the date and time as scheduled by the GMU Registrar, Tuesday **May 12th 7:30pm – 10:15pm.**
Mason Honor Code	The complete Honor Code is as follows: *To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code:* Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Cheating Policy	Any form of cheating on an activity, project, or exam will result in zero points earned. "Cheating" includes, but is not limited to, the following: reviewing others' exam papers, having ANY resources utilized when not allowed, collaborating with another student during an individual assignment. If you have questions about when the contributions of others to your work must be acknowledged and appropriate ways to cite those contributions, please talk with the professor or utilize the GMU writing center.
AI Policy	Generative AI tools may be used in this course with clear guidelines. Students must disclose when AI tools are used and how they contributed to the work. Misuse may be treated as a violation of academic standards.
Plagiarism and the Internet	Copyright rules also apply to users of the Internet who cite from Internet sources. Information and graphics accessed electronically must also be cited, giving credit to the sources. This material includes but is not limited to e-mail (don't cite or forward someone else's e-mail without permission), newsgroup material, information from Web sites, including graphics. Even if you give credit, you must get permission from the source to put any graphic that you did not create on your web page. Shareware graphics are not free. Freeware clipart is available for you to freely use. If the material does not say "free," assume it is not. Putting someone else's Internet material on your web page is stealing intellectual property. Making links to a site is, at this time, okay, but getting permission is strongly advised since many Web sites have their requirements for linking to their material. Review the Honor Code here.
Individuals with Disabilities	Students with documented disabilities should contact the Office of Disability Services (703) 993-2474) to learn more about accommodations.
Research Integrity Policy and Procedures	All members of the George Mason University community are expected to pursue their research and scholarly activities in a manner that is consistent with the highest standards of ethical, scientific, and scholarly practice. All research with human subjects must be reviewed prior to a project's initiation. Ethical review of projects will either be conducted by Mason's Office of Research Integrity and Assurance (ORIA) or the Institutional Review Board (IRB). The primary goal of this review is to assure that the rights and welfare of human research subjects in activities conducted at and/or under the auspices of George Mason University are adequately protected. All researchers must receive written approval from ORIA prior to conducting a research project involving human subjects. Failure to receive this written approval will be considered noncompliance.
Academic Integrity and Inclusivity	This course embodies the perspective that we all have different perspectives and ideas and we each deserve the opportunity to share our thoughts. Therefore, we will conduct our discussions with respect for those differences. That means, we each have the freedom to express our ideas, but we should also do so keeping in mind that our colleagues deserve to hear differing thoughts respectfully, i.e. we may disagree without being disagreeable. http://oai.gmu.edu/
E-Mail Policy	The Family Educational Rights and Privacy Act (FERPA) governs the disclosure of education records for eligible students and is an essential aspect of any course. Students must use their GMU email account to receive important University information, including communications

	related to this class. Instructors will not respond to messages sent from or send messages regarding course content to a non-GMU email address. Student responsibility: Students are responsible for checking their GMU email regularly for course-related information, and/or ensuring that GMU email messages are forwarded to an account they do check.
Late Work Policy	Late assignments will not be accepted without prior written approval from the instructor. Emergency, unforeseen, and/or serious extenuating circumstances will be handled on a case-by-case basis.