



## Syllabus

Course Information	<b>Econ 838: Econometric II</b> Location: Distance Education/Blackboard ( <a href="https://mymasonportal.gmu.edu/">https://mymasonportal.gmu.edu/</a> )
Instructor	Instructor: Daniel Houser ( <a href="mailto:dhouser@gmu.edu">dhouser@gmu.edu</a> ) Co-instructor: Jian Song ( <a href="mailto:jsong25@gmu.edu">jsong25@gmu.edu</a> ) Office Hours by appointment.
Course Description	This class provides an introduction to the design and analysis of economics experiments. The topics covered will be useful to anybody interested in running scientific experiments, but will be primarily geared toward behavioral experiments as conducted by economists and psychologists.
Course Objectives	Upon completion of the course, you will be able to learn the topics include using statistical tests to compare two or more treatments, and computing and interpreting analysis of variance. This course also includes the discussions on randomized block, Latin square, and factorial designs and applications to economics experiments.
Course Methodology	The class format will combine reading, lectures, presentations, and other learning tools. The class will be interactive and require every student to be engaged in the classroom discussion and assignments. In addition to the lectures, screencasts and timely completion of assignments, every student will be expected to be an active participant and a dedicated individual applying what you learn to every element of the course work.
Required textbook(s) and/or materials	<b>Required Text:</b> Box, Hunter and Hunter. (2rd Edition) Statistics for Experimenters. Wiley.  <b>Recommended Text:</b> 1. Cox, D. R. (1958) Planning of Experiments. Wiley. 2. Sidney Siegel and N. John Castellan Jr. (2rd edition) Nonparametric Statistics for the Behavioral Science.
Computer Requirements	<b>Hardware:</b> You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and access to 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. For the amount of Hard Disk Space required taking a distance education course, consider and allow for:  1. the storage amount needed to install any additional software and

	<p>2. space to store work that you will do for the course.</p> <p>If you consider the purchase of a new computer, please go to <a href="#">Patriot Tech</a> to see recommendations.</p> <p><b>Software:</b> Many courses use Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the <a href="#">myMason Portal</a>. See <a href="#">supported browsers and operating systems</a>. Log in to <a href="#">myMason</a> to access your registered courses. Some courses may use other learning management systems. Check the syllabus or contact the instructor for details. Online courses typically use <a href="#">Acrobat Reader</a>, <a href="#">Flash</a>, <a href="#">Java</a>, and <a href="#">Windows Media Player</a>, <a href="#">QuickTime</a> and/or <a href="#">Real Media Player</a>. 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 <a href="#">here</a>.</p> <p>Students owning Macs or Linux should be aware that some courses may use software that only runs on Windows. You can set up a Mac computer with Boot Camp or virtualization software so Windows will also run on it. Watch <a href="#">this video</a> about using Windows on a Mac. Computers running Linux can also be configured with virtualization software or configured to dual boot with Windows.</p> <p>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.</p> <p><b>Course-specific Hardware/Software</b></p> <p>Check the syllabus for your course or contact the instructor prior to the start of the course to find out about specific technical requirements for your class. Hardware or software required for your course or program may be available for purchase at <a href="#">Patriot Computers</a> (the University’s computer store that offers educational discounts and special deals).</p>
Course Website	<p>Blackboard 9.1 will be used for this course. You can access the site at <a href="http://mymasonportal.gmu.edu">http://mymasonportal.gmu.edu</a>. Login and click on the “Courses” tab. You will see <b>ECON 838</b> course NOTE: Username and passwords are the same as your Mason email account. You must have consistent access to an internet connection in order to complete the assignments in this course through Blackboard (<a href="http://mymason.gmu.edu">http://mymason.gmu.edu</a>). Note the technology requirements for Department of Economics in your Blackboard course menu—it contains details of minimum technology requirements.</p>
Participation	<p>Learning can only happen when you are playing an active role. It is important to place more emphasis on developing your insights and skills, rather than transmitting information. Knowledge is more important than facts and definitions. It is a way of looking at the world, an ability to interpret and</p>

	<p>organize future information. An active learning approach will more likely result in long-term retention and better understanding because you make the content of what you are learning concrete and real in your mind.</p> <p>Although an active role can look differently for various individuals, it is expected in this class that you will work to explore issues and ideas under the guidance of the professor and your peers. You can do this by reflecting on the content and activities of this course, asking questions, striving for answers, interpreting observations, and discussing issues with your peers.</p>
<p>Rules and Expectations</p>	<p>In correspondence/communication you will be expected to:</p> <ul style="list-style-type: none"> <li>a) Be professional and respectful in correspondence</li> <li>b) Make reasonable requests of the instructor. We will be happy to clarify course material and answer legitimate questions; however, please exhaust other information sources (e.g., syllabus, Blackboard) for answering your question before contacting me and remember, "Poor planning on your part does not constitute an emergency on my part"</li> </ul> <p>In regard to honesty in work you will be expected to:</p> <ul style="list-style-type: none"> <li>a) Review the University integrity and honesty policies in the student handbook for guidelines regarding plagiarism and cheating (summarized below). I will gladly clarify my stance on any questionable or "grey area" issues you may have.</li> <li>b) Refrain from dishonest work as it will receive a minimum penalty of zero on the assignment and a maximum penalty of a zero for the course with a report to the Honor committee. The GMU Honor Code requires that faculty submit any suspected Honor Code violations to the Honor Committee. Therefore, any suspected offense will be submitted for adjudication.</li> </ul>
<p>Mason Honor Code</p>	<p><b>The complete Honor Code is as follows:</b>  <i>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:</i>  <b>Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.</b></p> <p><i>(From the Catalog – catalog.gmu.edu)</i></p>
<p>Cheating Policy</p>	<p>Any form of cheating on an activity, project, or exam will result in zero points earned.</p> <p>"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.</p> <p>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.</p>
<p>Plagiarism and the Internet</p>	<p>Copyright rules also apply to users of the Internet who cite from Internet sources. Information and graphics accessed electronically must also be</p>

	<p>cited, giving credit to the sources.</p> <p>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 original 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.</p> <p>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 own requirements for linking to their material. <a href="#">Review the Honor Code here.</a></p>
Individuals with Disabilities	<p>Students with documented disabilities should contact the <a href="#">Office of Disability Services</a> (703) 993-2474) to learn more about accommodations that may be available to them.</p> <p><i>(From the 2019-2020 Catalog – <a href="#">catalog.gmu.edu</a>)</i></p>
Academic Integrity and Inclusivity	<p>This course embodies the perspective that we all have differing 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 in a respectful manner, i.e. we may disagree without being disagreeable. <a href="http://oai.gmu.edu/">http://oai.gmu.edu/</a></p>
Student Privacy Policy	<p>George Mason University strives to fully comply with FERPA by protecting the privacy of student records and judiciously evaluating requests for release of information from those records.</p> <p>Please see George Mason University's student privacy policy <a href="https://registrar.gmu.edu/students/privacy/">https://registrar.gmu.edu/students/privacy/</a></p>
E-Mail Policy	<p>Web: <a href="http://masonlive.gmu.edu">masonlive.gmu.edu</a></p> <p>Mason uses electronic mail to provide official information to students. Examples include notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback.</p> <p>Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate that account and check it regularly.</p> <p>Students are also expected to maintain an active and accurate mailing address in order to receive communications sent through the United States Postal Service.</p> <p><i>(From the 2017-18 Catalog – <a href="#">catalog.gmu.edu</a>)</i></p>
Course Grading & Evaluation	<p>Grades will be assigned as follows:</p> <p>A: 93.00-100%</p> <p>A-: 89.50-92.99%</p>

	<p>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%</p>
<p>Discussions– 5%  <b>(30 pts)</b></p>	<p>Your challenge is to immerse yourself in the topics and perspectives presented in the course. You will want to be able to comment on the discussion topics with authority. You are encouraged to make notes on your own thoughts about the various concepts and issues, and consider possible issues/outcomes. Your posts should be to the point and include sufficient technical detail for others to respond. You should present your opinions, but justify them with facts and proper sources. What did you disagree with and why, or not understand?</p> <p><b>Initial/Original Post</b>  Please post what you view as the appropriate responses to the above prompts. Your initial post should be 150-300 words. Please provide response with a clear, well-formulated thesis; sentence structure, grammar, punctuation, and spelling count. Support all posts with appropriate rationale and citations from readings; appropriately document sources.</p> <p><b>Responding to Others</b>  Responses to at least two classmates' postings should be approximately 200 words and should be thoughtful, substantial, polite and more extensive than a simple "well done" phrase or "I agree." Consider points of agreement, disagreement, assumptions, and value judgments. You will be able to respond to others after you submit your initial post.</p> <p><b>Instructions</b>  You will make at least one original post by Thursday 11:55 PM, EST, and react to at least two of your peers' posts by Sunday 11:55 PM, EST. Review the Discussion Board Participation guidelines (including rubric) in the syllabus, as appropriate.</p>
<p>Homework – 25%  (140 pts: 80 pts in Reading Assignment and 60 pts in Problem Sets)</p>	<p>Six (6) Problem Sets and Eight (8) Reading Assignments will be handed out. You need to submit your works on Blackboard before the due date. Refer to the course schedule and weekly overviews for details.</p>
<p>Exams – 40%  (200 pts: 100 pts in Midterm, and 100 pts in Final)</p>	<p>There will be two exams, and both are take-home format. The midterm will be on Week 8 and it covers the first half of the course. The date for the cumulative final will be on Week 15. The exam questions will be posted on blackboard at the designate date (will make announcement on blackboard later), and you have 24 hours to finish them. You can use the notes, textbooks when writing down your answers, however, <b>group discussion is not</b></p>

	<p><b>allowed.</b> Exam questions are required to be uploaded to Blackboard. Late submissions will not be accepted.</p> <p>No make-up exams will be offered, if you miss the midterm with a valid excuse, its weight will be shifted to the final. Exams missed for unexcused reasons will receive a score of 0.</p>
<p>Presentation – 10% <b>(50 pts)</b></p>	<p>You need to present one paper from the reading articles in the syllabus. Each presentation lasts for 10-12 minutes. You need to prepare a 8-12 pages slides for the presentation.</p> <p>More information about the Presentation will be posted on Blackboard.</p>
<p>Academic Term Paper – 20% (110 pts)</p>	<p>The purpose of this assignment is to give you experience in specifying a research question and then creating an experiment design and data analysis strategy to answer that question. The paper will be structured as an actual academic research paper, taking the reader from research question to conclusions. Importantly however, as explained below, you won't be expected actually to run your experiment.</p> <p>More information about the Term Paper will be posted on Blackboard</p>
<p><b>Need Help?</b> Utilize the “Course Q&amp;A” discussion forum or email your instructor directly.</p>	

Expect to work 15-20 hours per week on assignments for this course.

Unless otherwise stated, all assignments are due at 11:55 pm, EST by the end of the week in which they are assigned. For the purposes of this course, a week is defined as **beginning at 12:01 am each Monday EST, and ending at 11:55 pm on the following Sunday EST.**

If you have a question or concern or encounter a problem about an assignment, please contact the instructor/co-instructor immediately so we can discuss and work out a resolution.

## Reading Articles

1. Smith, V. L. ,1962, “An experimental study of competitive market behavior”, Journal of political economy, 70(2), 111-137.
2. Rassenti, S. J., Smith, V. L., & Bulfin, R. L., 1982, “A combinatorial auction mechanism for airport time slot allocation”, The Bell Journal of Economics, 402-417.
3. Plott, C. R., & Smith, V. L., 1978, “An experimental examination of two exchange institutions”. The Review of economic studies, 45(1), 133-153.
4. Rassenti, S. J., Smith, V. L., & Wilson, B. J., 2003, “Controlling market power and price spikes in electricity networks: Demand-side bidding”, Proceedings of the National Academy of Sciences, 100(5), 2998-3003.

5. Kosfeld, Michael, Heinrichs, Markus, Zak, Paul J., Fischbacher Urs, and Fehr, Ernst, 2005, "Oxytocin increases trust in humans", *Nature*, Vol. 435
6. Brosnan, Sarah F. and Waal, Frans B.M. de, 2003, "Monkeys Reject Unequal Pay", *Nature*, Vol. 425
7. Cox, James C., 2004, "How to Identify Trust and Reciprocity", *Games and Economic Behavior*, 46:2, 260-281
8. Houser, Daniel and Robert Kurzban, 2002, "Revisiting Kindness and Confusion in Public Goods Experiments", *American Economic Review*, 92:4, 1062-1069
9. List, John A. and David Lucking-Reiley, 2002, "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign". *Journal of Political Economy*, 110:1, 215-233
10. Fehr, Ernst and Bettina Rockenbach, 2003, "Detrimental effects of sanctions on human altruism", *Nature*, Vol. 422
11. Schotter, Andrew, 2003, "Decision Making with Naïve Advice", *American Economic Review*, Vol. 93, No. 2, 196-201
12. Cox, James and Oaxaca, Ronald, 1999, "Can Supply and Demand Parameters be Recovered from Data Generated by Market Institutions?" , *Journal of Business and Economic Statistics*, 17
13. Charness, Gary and Martin Dufwenberg, 2006, "Promises and Partnership", *Econometrica*, 74: 6, 1579-1601
14. Chen, Yan and Sherry Xin Li, 2009, "Group Identity and Social Preferences", *American Economic Review*, 99:1, 431-457
15. Gneezy, Uri, 2005, "Deception: The Role of Consequences", *American Economic Review*, 95: 1, 384-394
16. Cox, James C. and Oaxaca, Ronald L. 1989, "Laboratory Experiments with a Finite-Horizon Job-Search Model", *Journal of Risk and Uncertainty*, 2:301-330
17. Duffy, John and Ochs, Jack, 1999 "Emergence of Money as a Medium of Exchange: An Experimental Study", *American Economic Review* 89, 847-877.
18. Venon, Smith, Suchanek, Gerry and Williams, Arlington, 1988 "Bubbles, Crashes, and Endogenous Expectation in Experimental Spot Asset Markets", *Econometrica*, 56:5, 1119-1151
19. Gneezy, Uri and List, John A, 2006, "Putting Behavioral Economics to Work: Testing for Gift Exchange in Labor Markets Using Field Experiments", *Econometrica*, 74:5, 1365-1384
20. Chen, Yan and Tayfun Sonmez, 2006, "School Choice: An Experimental Study", *Journal of Economic Theory* 127:1, 202-231