SYLLABUS
Panel Data and Discrete Choice Models, Spring 2023
ECON 5372 (CRN 27099) & ECON 6372 (CRN 27190)

1. General Information

Time and Location: W 6:00-8:50PM, CoBA311
Instructor: Dr. Aaron Sun
Office Hours: By appointment, CoBA237
Email: xsun3@utep.edu (Students should contact me using UTEP email)

- Course Overview: This is a graduate level course in applied econometrics and
  will primarily consist of lectures, assigned readings, and computer exercises.
  Topics to be covered include fixed and random effects models, treatment
  evaluations, instrumental variables, discrete choice models.

- Course Objectives and Expected Outcomes: Upon completion of this course,
  students are expected to have a firm understanding of:
  o Data collection, interpretation, organization, and analysis
  o The formulation of an empirical economic model
  o Key classical assumptions and their significance
  o The principles and properties of least squares estimators
  o The interpretation of key statistics and diagnostics
  o The effects of the violations of the classical assumptions
  o Fixed and random effects models and their difference
  o Treatment evaluations and Difference-in-Differences
  o Instrumental variables, IV estimator, 2SLS
  o Binary response models
  o Censoring, truncation, sample selection
  o Count data models
  o The use of econometric software in a lab setting

2. Required Materials

  (A new version is available but the 6th edition is less costly. It
  can be found on websites such as amazon.com, chegg.com, textbooks.com, etc. at affordable prices.)
- **Stata**: Please follow the instruction to get Stata installed on your computer. [https://www.utep.edu/technologysupport/ServiceCatalog/SOFTWARE_PAGES/soft_stata.html](https://www.utep.edu/technologysupport/ServiceCatalog/SOFTWARE_PAGES/soft_stata.html). It is also available on the computers in our labs located on the third floor of CoBA.

3. **Tentative Course Outline**

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<th>Week</th>
<th>Topic</th>
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<tr>
<td>01: 01/18</td>
<td>Intro &amp; Chapters 10-11 Time Series</td>
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<tr>
<td>02: 01/25</td>
<td>Chapter 13 Pooling Cross Sections</td>
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<tr>
<td>03: 02/01</td>
<td>Chapter 14 FE &amp; RE Models</td>
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<td>04: 02/08</td>
<td>Chapter 14 FE &amp; RE Models</td>
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<tr>
<td>05: 02/15</td>
<td>Chapter 15 IV &amp; 2SLS</td>
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<td>06: 02/22</td>
<td>Chapter 15 IV &amp; 2SLS</td>
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<td>07: 03/01</td>
<td>Guest Lecture</td>
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<td>08: 03/08</td>
<td>Review 1</td>
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<td>09: 03/22</td>
<td>Midterm Exam, Wed., 6:00-8:50PM</td>
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<td>10: 03/29</td>
<td>Chapter 16 Simultaneity</td>
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<td>11: 04/05</td>
<td>Chapter 16 Simultaneity</td>
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<td>12: 04/12</td>
<td>Chapter 17 Discrete Choice</td>
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<td>13: 04/19</td>
<td>Chapter 17 Discrete Choice</td>
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<td>14: 04/26</td>
<td>Chapter 17 Discrete Choice</td>
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<td>15: 05/03</td>
<td>Review 2</td>
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<td>16: 05/10</td>
<td>Final Exam, Wed., 6:00-8:50PM</td>
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Note: The schedule is tentative and subject to change.

4. **Grading Policy**

Grades will be determined as follows:

- **Homework assignments** (10% × 4): There will be homework assigned about every three weeks. The assignments are to be used to check your understanding of the material and to help you work through some of the technical issues in this course. I strongly urge the students to use all the homework assignments as preparation for the exams. Econometrics cannot be learned passively and the assignments are a part of active learning. If you get behind or have difficulty early on, do not delay getting help or you will have more difficulty as the course proceeds.

Your homework should be typed in LaTeX or Microsoft Word, and submitted in PDF documents, supplemented with Stata do files. For each homework, please submit only one PDF and one do file. Please name your homework submission using the homework number followed by your last name and first name initial, e.g., HW1_SunX.pdf and HW1_SunX.do.
- **Exams** (25% + 35%): Both exams will be open book, but do not let the open book nature of the exam lead you into complacency. The material can only be mastered through ongoing practice and study. Exams may include problems and computer exercises.

Makeup assignments and exams will ONLY be provided for university excused absences or documented medical/family emergencies provided to the professor in advance. Being confused about the date or time of the exam, having non-refundable airplane tickets that conflict with the date, family vacations, etc. are not valid reasons for requesting a makeup assignment/exam. All valid reasons must be justified with documentation.

Final letter grades will be assigned based on the following scale:

- A = [90 100]
- B = [80 90]
- C = [70 80]
- D = [60 70]
- F = [0 60]

There will not be any extra credit. I will not attend to any emails begging for grade changes.

5. **Academic Integrity**

The University of Texas at El Paso prides itself on its standards of academic excellence. In all matters of intellectual pursuit, UTEP faculty and students must strive to achieve excellence based on the quality of work produced by the individual. In the classroom and in all other academic activities, students are expected to uphold the highest standards of academic integrity. Any form of academic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all graduates of UTEP. It is imperative, therefore, that the members of this academic community understand the regulations pertaining to academic integrity and that all faculty insist on adherence to these standards.

Any student who commits an act of academic dishonesty is subject to discipline. Academic dishonesty includes, and is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP), and available at [https://www.utep.edu/hoop/section-2/student-conduct-and-discipline.html](https://www.utep.edu/hoop/section-2/student-conduct-and-discipline.html), can
result in sanctions ranging from disciplinary probation, to a failing grade on the work in question, to a failing grade in the course, to suspension or dismissal, among others.

6. Other Important Information

- **Accommodations Policy:** The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an *accommodation based on a disability* must register with the **UTEP Center for Accommodations and Support Services** (CASS). Contact CASS at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the **CASS portal**. Students who would like to request a *religious accommodation* should contact the applicable faculty in advance. For more information about the religious accommodations process, please contact or visit the Equal Opportunity (EO) Office.

- **Communication:** Students are welcomed to communicate with the professor via email. Please always put “ECON 5372/6372 + your full name” in the subject line if you want the professor to read and respond your message in a timely fashion. The professor will not reply any email that does not come with a student name. For email etiquette, see [https://www.math.uh.edu/~tomforde/Email-Etiquette.html](https://www.math.uh.edu/~tomforde/Email-Etiquette.html).

- **Course Evaluation:** Your constructive assessment of this course plays an indispensable role in shaping education at UTEP. Upon completing the course, please take the time to fill out the online course evaluation.

- **Copyright Statement:** All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.