Introduction to Econometrics (ECON 4310.01)  
Spring 2018  
Texas A&M University-Corpus Christi  
College of Business  

Course number: ECON 4310.001  
Instructor: Veysel Avsar  
Semester: Spring 2018  
Office: OCNR 356  
Office Telephone: 361-825-2385  
Email: veysel.avsar@tamucc.edu  

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>ECON 4310.001   MWF 09:00-09:50 AM   OCNR-131</th>
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<tbody>
<tr>
<td>Office Hours:</td>
<td>MW 1:30-3 p.m.  [and also available by appointment]</td>
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</table>
| Internet:      | E-mail :veysel.avsar@tamucc.edu  
                 url : www.veyselavsar.com  
                 (You may wish to study this before emailing Dr. Avsar or another faculty member:  
                 https://www.math.uh.edu/~tomforde/Email-Etiquette.html.) |
                 (DO NOT buy the EVViews version)  
                 ISBN 9780134182742  
                 STATA software (REQUIRED): purchase at a heavily discounted rate, go to  
                 https://www.stata.com/order/new/edu/gradplans/student-pricing/ |
| Prerequisites: | ECON2301, ECON2302, ORMS3310 (or MATH 1342 or equivalent) and junior standing or above. |

Course Description:  
The main objective of this course is to teach you to use the techniques of econometrics that will be useful in the future whenever you are required to conduct data analysis. You will use many of the techniques taught in the course in your work in management and other consulting companies (including litigation consulting), financial and government institutions and non-profit organizations (pretty much any job you can get with an Economics degree). Econometrics requires some statistical theory, but the main focus will be on applying econometric techniques in real life. Econometrics is one of the most useful tools in economic analysis. The course enables you to formulate and test econometric hypotheses, and covers the theory and practice of: Ordinary least-squares regression, problems of heteroskedasticity, multicollinearity and autocorrelation, qualitative independent and dependent variable, and simple time-series analysis. Students are expected to use statistical software packages as part of this course. You should have access to a computer that has Microsoft EXCEL, and STATA on it. You can purchase the STATA software at:  
https://www.stata.com/order/new/edu/gradplans/student-pricing/  

Relationship to Other Coursework:  
This is a course that prepares students with quantitative and research skills for other courses in economics, finance and other related programs.  

Instructional Methodology:  
The class will be interactive. A variety of learning methodologies will be used, such as: lectures, class discussions, homework exercises and research project.
Attendance Policy:
Students are held responsible for class attendance. Class attendance is a necessary but not sufficient condition for active class participation and satisfactory course performance. Students absent from classes are responsible for making arrangements to submit assignments due, material discussed, and announcements made in class. Assignments/quizzes and exams missed due to absences cannot be made up except for illness, official university travel or other emergencies, in which case a doctor’s note or other official documentation is required to accompany the assignment. **Class attendance will be taken**, and good attendance will be considered when assigning final letter grades if a student’s average is just below the borderline cutoff between letter grades.

**Important**: I encourage students to come to my office hours and get assistances on understanding various concepts. Please keep me informed of any extraordinary circumstances that may hinder your academic success in this course.

Performance Evaluation and Grading:

Major Course Requirements

Student performance will be evaluated on the basis of assignments, a group research project, midterms and an optional comprehensive final exam. The material covered on examinations may include scheduled material from the text, class lecture and activities, including assignments and class presentations. If you must miss an exam, you need to provide documentation of the exigency for missing it – BEFORE the scheduled exam, if possible. With this documentation, you may take the final exam as your make-up.

**NO LATE WORK WILL BE ACCEPTED!!!** Your score on any late work will be zero (-0-).

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<thead>
<tr>
<th>Points of Course Components Used for Calculating Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>100</td>
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<tr>
<td><strong>Two midterm exams, tentatively scheduled for February 26 and April 30</strong></td>
<td>200</td>
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<tr>
<td><strong>Group Research Project</strong></td>
<td>200</td>
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<tr>
<td>Deliverables:</td>
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<td>1. Research proposal</td>
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<td>2. Project</td>
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<td>3. Presentation</td>
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<tr>
<td><strong>OPTIONAL Comprehensive Final Exam, Wednesday, May 9 @ 8 am,</strong></td>
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<td><strong>TOTAL</strong></td>
<td>500</td>
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* The OPTIONAL final exam may be taken to replace ONE of the midterm exams. The final exam score will replace whichever score is lower – for either the Feb. 26 midterm or the April 30 midterm.

The following is the weight distribution of coursework for determining the overall course average:

**The Official Course Grade is determined by using the following scale:**

A: 90% or above (450+ points)  
B: 80 - 89.99% (400 - 449 points)  
C: 70 - 79.99% (350-399 points)  
D: 60 - 69.99% (300-349 points)  
F: below 60% (> 300 points)
The student’s performance, not the instructor, determines the course grade. No additional work will be given after the final exam to supplement a course grade. Grades are given based solely on student performance, not needs or any personal reasons. It is the students’ own responsibility to ensure that all scores are correct.

**NOTE:** Do **NOT** rely on the percentage reported to you by Blackboard. That percentage is based on what you have submitted, **NOT** on what has been assigned.

**Student Code of Ethics:** This course, and all other courses offered by the College of Business (COB), requires all of its students to abide by the COB Student Code of Ethics (available online at [www.cob.tamucc.edu](http://www.cob.tamucc.edu)). Provisions and stipulations in the code are applicable to all students taking College of Business courses regardless of whether or not they are pursuing a degree awarded by the COB.

**Group Research Project**

**Overview**

Over the semester, students will submit a group project which applies the econometric modeling and statistical techniques learned in class to data relating to a topic of your choice.

**Due dates**

- **January 29:** Forming the Groups
- **February 23:** Research Proposal
- **May 2:** Project Submission

**Deliverables**

1. Research proposal
2. Written project
3. Presentation

**Collaboration:**

Groups can work in a cloud network (such as google documents). Keep in good contact with each other and if issue arise that cannot be resolved internally, talk with me immediately.

**Grading:**

The breakdown of grades for the research project is as follows: 20 pts. for the proposal, 80 pts. for the presentation, and 100 pts. for the paper. Grades are determined by the quality of outputs. After the project is completed, each group member will evaluate each group members’ level of participation. Those students who inadequately participate will only receive a fraction of the group’s grade.

**- Paper Requirements**

The research paper is a formal econometric analysis that includes a broad overview of the topic, main economic analysis points, and concluding remarks. You should describe your research question, data sources and descriptive statistics and discuss the relevant econometric estimation and results. It is expected that the paper will be free of grammatical mistakes and have one voice.
**Paper expectations:**

1. 2 pages per group member excluding graphs and tables
2. Figures and tables must be included inside of the paper (not at the end of the paper).
3. Must include an economic framework to study the topic, data description, empirical analysis, results and conclusion.
4. Proper citations in APA or MLA.
5. Mandatory sentences
   i. In the introduction: “Our research topic is …. “
   ii. In the conclusion: “We learned that …

**Tips**

1. If unfamiliar with referencing in research papers, get help from the writing center.
2. May find that finding one voice is most easily done by letting one group member thread the parts together.
3. Tables and figures should be reader friendly. Check academic journal articles to see how to present the data and results.
4. Follow research paper rubric in Blackboard.
5. Start early and give yourself plenty of time. *This is not a night-before-it-is-due assignment.*
6. Make expectations on assignments and due dates clear with names.

**Researching the topic**

While many topics are from the media, research sources must be both non-scientific and scientific. That is, you may use non-scientific sources (Wall Street Journal, The Economist, CNN, etc.), but you must also use academic papers related to your topic. To find academic sources, use google and google scholar. You can also review the reference section of the initial papers found to identify potential sources. There are some other databases that act as depositors of academic and professional articles: SSRN, NBER Working papers, Ebsco, JSTOR, Econ lit, Web of knowledge, Web of science, ideas - [http://ideas.repec.org/](http://ideas.repec.org/), AEA database.

There is a very convenient Firefox add-on (or stand-alone application) called Zotero. It adds a button in the address bar to add a journal article you are currently viewing to a list that you can manage/edit, export as a bibliography, etc.

- **Presentation Requirements**

**Presentation expectations**

1. Each group member is assigned 3-5 minutes each.
2. Construct a presentation using Powerpoint, Prezi, or other presentation software.
3. Include visuals to explain points.

**Layout of presentation is as follows:**

1. Introduce topic
   a. This should include both an oral and visual (if possible) description of the research topic (about 2-3 minutes).
   b. Mandatory sentence in the introduction: “Our research topic is …. “
2. Describe the data and empirical methods
3. Present your results
4. Broad overview on findings
   a. This may include historical contexts, economic framework for the topic, various benefits and costs, other findings which are relevant to the topic
5. Conclusion
   a. What you learned! (about 2 minutes)
   b. Mandatory sentence in the conclusion: “We learned that …”
6. Questions
   a. Permit 2 minutes for questions.

Tips

- You may find it helpful to write out what you are going to say and practice it a few times.
- You can bring 3x5 cards as a helper, but you can’t read verbatim off of the cards.
- Visual aids greatly assist in explaining what you are saying.
- Follow the group presentation rubric in Blackboard.
- Meet together and do a dry run.
- Time your group as there is a penalty for being going over on time.

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**Dropping a Class**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. *Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.* Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. **April 6** is the last day to drop a class with an automatic grade of “W” this term.

**Emergency Procedure:**

There are times where extenuating circumstances, such as an extended illness, family emergency, a death in the family or military deployment arise and the student must miss multiple days of school due to the situation. In these cases, it may be difficult for the student to contact their faculty due to the situation (i.e. hospitalization). **If your emergency is such that you only miss one or two days of class,** you can submit the documentation of your excuse as an email attachment to me via email at deniz.gevrek@tamucc.edu

**If your emergency is such that you miss 3 or more consecutive days of class you must follow a different procedure:** The Dean of Students, in the Office of Student Engagement & Success, can assist students/families in this situation when a student is going to miss three or more consecutive days of class. This notification does not excuse the absence; it merely serves as a courtesy notification regarding the student’s situation. The faculty member will still make the decision on individual cases related to any missed work, assignments or test. Documentation must be provided to the Dean of Students that supports the reason for the absence within one week of the original notice. For assistance in these types of situations, students should contact the Office of Student Engagement & Success at 361-825-2612 or go by the office in the University Center, Room 318.

**Classroom/professional behavior:**

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.
Classroom Etiquette:
Examples of classroom misconduct that may affect student evaluation include:

1. **Habitually** entering or leaving the classroom during class time without the consent of the instructor.
2. Using any telecommunication device (definition: Use of a mobile phone during class, including text messaging, surfing internet). Out of respect for your fellow classmates mobile phones are to be turned off and placed in your bag or pocket. If you are caught using a phone the instructor reserves the right to confiscate the phone and return it at her convenience.
3. Copying tests and quiz questions (definition of copying: making written or digital copies including but not limited to taking photos, videos etc.) with the purpose of distribution.
4. Posting inappropriate, unrelated and offensive comments on the online discussion forums and course web page.
5. Talking or chit-chatting with other students, and any other activities that are disruptive to the learning environment are also not allowed.
6. Engaging in fraudulent activities regarding class attendance, discussion forums, assignments and tests.

Students caught engaging in such activities should expect class or course dismissal along with a letter of reprimand placed in their academic files.

According to the University policy, **no cell phone is allowed** in a room when a test/exam is taken.

Statement of Civility:
Texas A&M University–Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

Academic Integrity/Plagiarism Policy:
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) Any directly quoted information included in written assignments that is taken from textbooks, supplemental materials, or other published sources must include proper citations and source information.

Students caught engaging in such activities should expect a zero grade on the exam/assignment for the **first violation** and a letter of reprimand placed in their academic file. A **second violation** will result in an **automatic grade of F for the course**. Students in the class are subject to the COB Student Code of Ethics.

Disabilities Accommodations:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

Statement of Academic Continuity:
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard
and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

Grade Appeals:
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site: http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Dean’s office in the college in which the course is taught or the Office of the Provost.

Other Aspects of the Course:
Oral and Written Communication Content:
Student projects and assignments will provide opportunities for evaluating students’ performance in oral and written communications. This course emphasizes accuracy and relevance in writing technical research papers.

Technology Applications:
This course emphasizes the development of statistical and quantitative skills. In particular, students are required to use a computer software program STATA to conduct statistical analysis. Reports and presentations will be also computer generated. Students are also expected to use the Internet extensively for information and data gathering. Students may use computers in class for note taking and presentations.

Ethical Perspectives:
Discussions related to ethical issues in data collection and reports will be provided.

Global Perspectives:
Throughout the course, there will be analyses and comparisons of economic and business decision-making processes in the U.S. and those in other countries.

Demographic Diversity Perspectives:
There is ample opportunity to compare and discuss demographic diversity in the course, particularly within the context of statistical and sampling analyses for different races, genders, education and income levels.

Political, Social, Legal, Regulatory, and Environmental Perspectives:
The U.S. and other countries’ decision-making processes will be examined throughout the course. How our statistical and sampling practices affect political, legal, government policy and economic outcomes are continuing topics for discussion throughout the course.

Last Day of Withdrawal: Only students who complete the course withdrawal form to withdraw from all classes by the May 1 deadline will receive an automatic grade of “W.”
# TENTATIVE COURSE OUTLINE

<table>
<thead>
<tr>
<th>Module 1: -- THE BASIC REGRESSION MODEL</th>
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<tbody>
<tr>
<td>An Overview of Regression Analysis</td>
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<tr>
<td>Review of Statistics</td>
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<tr>
<td>Start Ordinary Least Squares</td>
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<tr>
<td>January 17, 19, 22, 24, 26 &amp; 29</td>
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<tr>
<th>Module 2: – STATA Intro; Regression Analysis in STATA</th>
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<tr>
<td>January 31 &amp; February 2, 5, 7</td>
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<tr>
<th>Module 3: The Classical Model</th>
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<td>February 9, 12 &amp; 14</td>
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**February 16: Project Information Session**

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<th>Module 4: Hypothesis Testing and Statistical Inference</th>
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<td>February 19 &amp; 21,23</td>
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**Midterm 1: February 26, Monday**

| Module 5: Violations of the Classical Assumption, Choosing the Independent Variables, Choosing a Functional Form | February 28, March 2, 5 |
|-----------------------------------------------------------------------------------------------------------------|

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<thead>
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<th>Module 6: Multicollinearity</th>
<th>March 7, 9, 19 &amp; 21</th>
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<tr>
<th>Module 6: Serial Correlation</th>
<th>March 23, 26, 28 &amp; 30</th>
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<tr>
<th>Module 7: Heteroskedasticity</th>
<th>April 2,4 &amp; 6</th>
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<tr>
<th>Module 9: Dummy Dependent Variable Techniques</th>
<th>April 9, 11, 13, 16 &amp; 18</th>
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<tr>
<th>Module 10: Research Presentations</th>
<th>April 20, 23, 25 &amp; 27</th>
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**Midterm 2: April 30, Monday**

**May 2: Review for Final Test**

**Optional Final Exam: Wednesday, May 9 @ 8 am.**