ECON 5023-105: Statistics for Decision Making

Course Description:

This course is designed to give students a working knowledge of the statistical techniques used to solve practical problems in economics and business. While the statistical theory will be covered, the practical application of this theory will be stressed by way of examples drawn from various fields in economics

Class Dates, Location and Hours:

Dates: May 17 – 19 and May 31 – June 2, 2019
Location: College of Allied Health, OU Health Sciences Center, 1200 N. Stonewall, Oklahoma City, OK 73117-1215
Hours: Friday 5:30-9:30 p.m.; Saturday 8:30 a.m.-4:30 p.m.; Sunday 1:00-5:00 p.m.
Last day to enroll or drop without penalty: April 18, 2019

Site Director:

Email: apokc@ou.edu. Phone: 405-271-4522.

Professor Contact Information:

Course Professor: Saleh S. Tabrizy, PhD
Mailing Address: 308 Cate Center Drive,
                        CCD1, No. 325,
                        Norman, OK, 73072
Telephone Number: (405) 325-3614
Email Address: tabrizy@ou.edu
Professor availability: The professor will be available via email to students before and after the class sessions. On-site office hours are half an hour before and after each class session, by appointment.

Textbook(s) and Instructional Materials:

Student materials are available at the OU Bookstore Website at https://ou.textbookx.com/institutional/index.php. There is no longer a physical bookstore, the store will remain, but textbooks will not be stocked. The website has book selling, renting, buying, returning, and order tracking capabilities. If you need help with an order, or if you have any questions contact the toll-free phone at 1-(855)-790-6637, agents are available from 9a – 5p (EST) Monday – Friday. For more information or questions about textbooks, feel free to contact apsyllabi@ou.edu. Text prices are available online

1. Testbook: *Introductory Business Statistics* by A. Holmes, B. Illowsky, and S. Dean, OpenStax: Rice University, 2019, ISBN (for PDF ver.): 978-1-947172-47-0
2. This course relies heavily on course materials developed by my good colleague Prof. Alexander Holmes. Along with Prof. Barbara Illowsky and Prof. Susan Dean, he has written an open access free textbook, entitled: *Introductory Business Statistics*. I use their textbook for this course. You will find their textbook under the course website (http://saleh.oucreate.com/statistics).

3. This course also relies on a video series developed by my good colleague Prof. Alexander Holmes. Along with our colleagues at OU Janux, he has produced an online course that includes very interesting videos on the subjects that are discussed in the above textbook. There is no need for you to sign up for OU Janux, however. You will find YouTube links to his vides under the course website (http://saleh.oucreate.com/statistics).

4. Lastly, this course relies on a problem set developed by my good colleague Prof. Alexander Holmes. For a given chapter, you are asked to read the textbook, review the related videos, and then attempt the homework problems. You can check your work with the answer key. These homework exercises are not to be turned in for credit. You will find the problem sets under the course website (http://saleh.oucreate.com/statistics).

Course Software:

Students are asked to install an update version of MS Excel on their laptop devices – OU students can install this software for free. Students must bring their laptop devices to the seminar sessions.

Follow this link to the download page: http://www.ou.edu/tulsa/it/software

Course Objectives:

This is a course on applied statistics, which surveys basic statistical techniques with particular emphasis on business and economic applications. The learning objective of this course is to improve students' analytical skills in understanding and employing the descriptive and inferential statistics. We begin this course by learning how to describe the data in use. Then, we focus on probability theory, which enables us to understand the essence of statistical inference. And for the rest of the course, we explore multiple inference tools such as confidence interval estimation, hypothesis testing, and the analysis of variance. These tools help us make use of sample data to reach conclusions about population parameters

Course Outline:

1. An Introduction to Statistics with Emphasis on Sampling and Descriptive Statistics

   Contents: Chapters 1 and 2 from the textbook. Seminar: Excel work, descriptive statistics.

2. Probability Distribution

   Contents: My slides set on probability distribution (available on course website), Sections 4.2, 4.4, and 5.1 from the textbook, and Chapter 6 from the textbook.

   Seminar: Excel work, binomial, Poisson, and normal distribution.

3. Sampling Distribution

   Contents: My slides set on sampling distribution (available on course website) and Chapter 7 from the textbook.

   Seminar: Excel work, sampling distribution of means.

4. Confidence Interval Estimation

   Contents: Chapter 8 from the textbook.

   Seminar: Excel work, confidence interval estimation for population mean.

5. Hypothesis Testing

   Contents: Chapters 9 and 10 from the textbook. Seminar: Excel work, hypothesis testing

Assignments, Grading and Due Dates:

1. Students must do the problem sets, uploaded on the course website. However, there is no need for them to submit your work on the problem sets.

2. Excel Assignments No. 1: After the first seminar sessions (05/17-19), students will be asked to submit the first set of Excel assignments (due date: 05/30 at 11:59 PM). Excel Assignments No. 1

must be submitted via email. Attach your work to an email, entitled: *ECON 5023, Excel Assignments No. 1*. Send it to my email (tabrizy@ou.edu) no later than 05/30 at 11:59 PM.

3. Excel Assignments No. 2: After the second seminar sessions (05/31-06/02), students will be asked to submit the second set of Excel assignments (due date: 06/13 at 11:59 PM). Excel Assignments No. 2 must be submitted via email. Attach your work to an email, entitled: *ECON 5023, Excel Assignments No. 2*. Send it to my email (tabrizy@ou.edu) no later than 06/13 at 11:59 PM.

4. Final Exam: At the end of the second seminar sessions (on Sunday 06/02), students will be asked to take their final exam. This exam includes some short answer questions, some multiple-choice questions, and involves some Excel work

Grading:

This is a letter-graded course: A, B, C, D, or F.

Item	Due date	Percent of grade
Problem sets	05/16 at 11:59 PM	Required, no need to be submitted.
Excel Assignment No. 1	05/30 at 11:59 PM	20%, must be submitted via email.
Excel Assignment No. 2	06/13 at 11:59 PM	20%, must be submitted via email.
Final exam	On Sunday 06/02	60%

Notice: The sum of your assignments and final exam grades will determine your final letter grade on a scale where 90 or above is an *A* and less than 60 is an *F*. Test will not be curved, needs based appeals will not be entertained, and grades will be determined in strict accordance with the above policy. Even if you end up with, say, 89.99999, you earn a grade of *B*. Failure to meet assignment due dates could result in a grade of I (Incomplete) and may adversely impact Tuition Assistance and/or Financial Aid.

POLICIES AND NOTICES

Attendance/Grade Policy

Attendance and participation in interaction, individual assignments, group exercises, simulations, role playing, etc. are valuable aspects of any course because much of the learning comes from discussions in class with other students. It is expected that you attend all classes and be on time except for excused emergencies.

Excused absences are given for professor mandated activities or legally required activities such as emergencies or military assignments. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Unavoidable personal emergencies, including (but not limited to) serious illness; delays in getting to class because of accidents, etc.; deaths and funerals, and hazardous road conditions will be excused.

If you are obtaining financial assistance (TA, STAP, FA, VA, Scholarship, etc.) to pay all or part of your tuition cost, you must follow your funding agency/institution's policy regarding "I" (Incomplete) grades unless the timeline is longer than what the University policy allows then you must adhere to the University policy. Students who receive Financial Aid must resolve/complete any "I" (Incomplete) grades by the end of the term or he/she may be placed on "financial aid probation." If the "I" grade is not resolved/completed by the end of the following term, the student's Financial Aid may be suspended make the student ineligible for further Financial Aid.

Students are responsible for meeting the guidelines of Tuition Assistance and Veterans Assistance. See the education counselor at your local education center for a complete description of your TA or VA requirements.

Academic Integrity and Student Conduct

Academic integrity means honesty and responsibility in scholarship. Academic assignments exist to help students learn; grades exist to show how fully this goal is attained. Therefore all work and all grades should result from the student's own understanding and effort.

Academic misconduct is any act which improperly affects the evaluation of a student's academic performance or achievement. Misconduct occurs when the student either knows or reasonably should know that the act constitutes misconduct. Academic misconduct includes: cheating and using unauthorized materials on examinations and other assignments; improper collaboration, submitting the same assignment for different classes (self-plagiarism); fabrication, forgery, alteration of documents, lying, etc…in order to obtain an academic advantage; assisting others in academic misconduct; attempting to commit academic misconduct; destruction of property, hacking, etc…; intimidation and interference with integrity process; and plagiarism. All students should review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html

Students and faculty each have responsibility for maintaining an appropriate learning environment. All students should review policies regarding student conduct at http://studentconduct.ou.edu/

Accommodation Statement

The University of Oklahoma is committed to making its activities as accessible as possible. For accommodations on the basis of disability, please contact your local OU Site Director.

Adjustment for Pregnancy/Childbirth-Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html.

Title IX Resources

For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24/7, counseling services, mutual no-contact orders, scheduling adjustments, and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office at smo@ou.edu or (405) 325-2215 (8-5), or the Sexual Assault Response Team at (405) 615 -0013 (24/7) to report an incident. To learn more about Title IX, please visit the Institutional Equity Office's website at http://www.ou.edu/content/eoo.html

Course Policies

Advanced Programs policy is to order books in paperback if available. Courses, dates, and professors are subject to change. Please check with your OU Site Director. Students should retain a copy of any assignments that are mailed to the professor for the course. Advanced Programs does not provide duplicating services or office supplies.

Any and all course materials, syllabus, lessons, lectures, etc. are the property of professor teaching the course and the Board of Regents of the University of Oklahoma and are protected under applicable copyright.

For more information about Advanced Programs, visit our website at: http://www.goou.ou.edu/

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INSTRUCTOR VITA

Saleh S. Tabrizy, Ph.D.

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Education

- 2010 – 2015: Ph.D. in Economics; University of Wisconsin – Milwaukee, Milwaukee, WI, USA
- 2009 – 2010: A.S.C. in International Economic Policy Research; Kiel Institute for the World Economy (IfW), Kiel, SH, Germany
- 2007 – 2009: M.Sc. in International Economics and Finance; Otto-Von-Guericke University of Magdeburg, Magdeburg, SA, Germany
- 2002 – 2006: B.A. in Economics; Allameh Tabataba'i University, Tehran, Iran

Current Positions

- Assistant Professor of Economics, Department of Economics, The University of Oklahoma
- Member of the Editorial Review Board, *Journal of African Business*, Routledge: Taylor & Francis Group

Frequently Taught Advanced Programs Courses

- ECON 5023: Statistics for Decision Making

Major Areas of Teaching and Research Interest

- Statistics and International Trade
- International Trade
- International Finance
- The Economics of Development, Innovation, and Growth

Representative Publications and Presentations

Publications:
- 'Is 'No News' Really 'Good News'? Country Visibility and the Location Choice in Foreign Direct Investment' (with Laurel Adams and Rebecca Neumann), *International Review of Applied Economics*, Volume 32, Issue 4, PP. 489-524, May 2018.
- 'Productivity and Offshoring Innovative Activities,' *Economics of Innovation and New Technology*, Volume 26, Issue 6, PP. 501-515, June 2017.
- 'An Empirical Assessment of the Effects of Trade in Innovative Tasks on Innovation Output,' *Southern Economic Journal*, Volume 82, Issue 1, PP. 307-334, July 2015.

Research Presentations:
- 2018: Texas Conference on International Business and Economics, Baylor University (Waco, TX) 2017: Southern Economic Association Conference (Tampa, FL)
- 2016: Eastern Economic Association Conference (Washington, DC), OU Weekly Economics Seminar Series (Norman, OK)
- 2014: Southern Economic Association Conference (Atlanta, GA), Midwest Economics Association Conference (Evanston, IL), UWM Weekly Economics Seminar Series (Milwaukee, WI)
- 2013: Southern Economic Association Conference (Tampa, FL), Midwest International Trade Conference, University of Michigan (Ann Arbor, MI), Wisconsin Economics Association Conference (Stevens Point, WI), UWM International Economics Lunch (Milwaukee, WI)
- 2010: IfW ASP Research Seminar (Kiel, SH)
- 2009: OVGU International Economics Seminar (Magdeburg, SA) 2005: ATU Students Conference on Iran's Economy (Tehran)

Representative Honors and Awards Received

- 2018: Outstanding Reviewer, Journal of International Trade Law and Policy

- 2017: Libraries Data Grant, The University of Oklahoma CTE "Creatie" Award, The University of Oklahoma
- 2010 – 2012: Chancellor's Graduate Student Award, UW- Milwaukee 2009 – 2010: IfW ASP Scholarship, ASP Alumni Association

Major Professional Affiliations

- Member of American Economic Association (2011 – Present)
- Member of Southern Economic Association (2013 – Present)