

DEPARTMENT OF ECONOMICS & FINANCE
College of Business, Tennessee State University, Nashville, TN, USA

Spring 2013 Syllabus for Statistical Analysis I (ECON-2040)

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OFFICE HOURS:

Monday, Wednesday: 11.00AM – 4.00PM (*Avon Williams Campus #J-401, 4th Floor*)

TEXTBOOK AND REGISTRATION WITH MCGRAW-HILL CONNECT:

This course is first in the sequence of ECON 2040 and ECON 3050 (newly designed.) Together, these two courses will use a customized book that comes bundled with an online homework and testing system (McGraw-Hill Connect). Once registered and paid for the package in full, you should have continuous access for approximately 700 days (or, about two years). This should be a sufficient time for you to complete both ECON 2040 and ECON 3050. Both of these courses are required for all College of Business majors.

Here are the steps that you should follow:

Visit http://connect.mcgraw-hill.com/class/a_ray_spring_2013

Click on the "Register Now" button on that page. Follow the instructions on the screen to complete your registration.

This is a MANDATORY step and completing the registration will allow you to access the e-book, and all the chapter based assignments.

Although we will be following a customized e-book for these two (ECON 2040 and ECON 3050) courses, contents covered in this course (ECON 2040) roughly corresponds to the first ten chapters of Douglas A. Lind, William G. Marchal, Samuel A. Wathen, "Statistical Techniques in Business & Economics", McGraw-Hill Irwin, 15th Edition.

Having a hardbound book is not required. Given the current settings, you should be able to print from the e-book if you desire to do so.

If you want to have hard copies of the book, please get in touch with the bookstore and/or McGraw-Hill.

(You are REQUIRED to use a proper calculator for this course. You are NOT allowed to use cell-phone calculators.)

TOPICS IN MORE DETAIL

- What is Statistics (Chapter 1)
- Describing Data: Frequency Table, Frequency Distributions, and Graphic Presentation (Chapter 2)
- Describing Data: Numerical Measures (Chapter 3)
- Describing Data: Displaying and Exploring Data (Chapter 4)
- A Survey of Probability Concepts (Chapter 5)
- Discrete Probability Distributions (Chapter 6)

- Continuous Probability Distributions (Chapter 7)
- Sampling Methods and Central Limit Theorem (Chapter 8)
- Estimation and Confidence Intervals (Chapter 9)
- One Sample Tests of Hypothesis (Chapter 10)

INTENDED OUTCOME:

The purpose of this course is to provide students with the fundamental understanding of the core concepts of various statistical techniques to facilitate research & decision making in business, finance, accounting, and economics. A good understanding of the materials covered in this course will help students familiarize themselves with the foundations of essential statistical techniques that they are expected to face in contemporary business settings. This is a REQUIRED course for ALL business majors in the College of Business at TSU.

ATTENDANCE POLICY:

University attendance policies will be strictly enforced in the class.

You are REQUIRED to maintain regular attendance.

You must come to class on time.

Appropriate actions according to the rules and regulations of the university will be followed to deal with low attendance issues.

GRADING:

- Grading in this class will be based on 10 chapter based assignments, 1 midterm, 1 comprehensive final and 1 software based assignment.
- Ten Chapter Based Assignments: $80 \times 10 = 800$ points
- One Midterm: 400 points
- One Final: 500 points
- One Software Assignment: 300 points
- Total for this course: 2000 points

GRADING GUIDELINES:

Suppose your final earned points in the course is given by P

- You will earn A if $2000 \geq P \geq 1800$
- You will earn B if $1800 > P \geq 1600$
- You will earn C if $1600 > P \geq 1400$
- You will earn D if $1400 > P \geq 1200$
- You will earn F if $1200 > P$

SPECIAL SOFTWARE LEARNING:

Learning a software is an integral part of this course. You may use Microsoft Excel and Microsoft Word which are easily available in the computer labs. If you do not have license for Microsoft Office products for your personal computer then OpenOffice or LibreOffice both

offer viable alternatives. Both of them are FREE and very powerful. To learn more, visit <http://www.openoffice.org/> or <http://www.libreoffice.org/>.

However, I will teach this course by using R programming language pretty extensively. More information is available from The R Project for Statistical Computing's official website at <http://www.r-project.org/>.

I strongly encourage you to visit this website and get a headstart by reading some of the materials listed under the "Manuals" section.

I especially recommend the introductory manual available at

<http://cran.r-project.org/doc/manuals/r-release/R-intro.pdf>.

Best of all, R software is FREELY available from the R Project's website. You may install it on your laptop, desktop, our USB (flash) drive FREE of charge.

There is no shortage of excellent R related books that are commercially available. If you are looking for a very inexpensive book then I highly recommend R Cookbook (O'Reilly Cookbooks) [Paperback] By Paul Teetor. Last time I checked, Amazon.com was selling the book for less than \$30. Please note that I DO NOT REQUIRE you to buy this book for this class.

I will also highly recommend RStudio. It is an extremely powerful IDE that provides a very usable and productive interface for the R programming language. You may like to get more information about RStudio by visiting <http://www.rstudio.com/>.

DISABILITY POLICY:

University policies regarding disability will be followed.

Any student requiring any special accommodation should meet the instructor and/or the concerned department in the university.

Requests for appropriate accommodations will be entertained and university guidelines will be followed in each case.

It is a policy of the university not to discriminate any individual based on race, ethnicity, disability status etc.

SPECIAL CLASSROOM POLICIES:

- You shall not use any electronic and communication equipments in the class. That include cellphones, pagers, laptops, ipods, ipads etc.
- You are REQUIRED to use a proper calculator for this course. You must bring your calculator to each class. DO NOT use cell-phone calculators.
- You are expected to be in class and on time.
- Be courteous to the learning needs of your fellow classmates. Please do not introduce any unnecessary distraction in the class.
- Do not plan on missing any deadline and request for extension may be denied.