

**COURSE SYLLABUS  
SOUTHEAST MISSOURI STATE UNIVERSITY**

**Department: Economics and Finance**  
**Course Title: Econometrics I**

**Course No EC451**  
**New Spring 2014**

**I. Catalog Description and Credit Hours of Course**

An introduction to quantitative analysis of economic behavior. (3 credit hours)

**II. Prerequisite(s)**

MA134 College Algebra  
EC215 Principles of Microeconomics or AG245 Agricultural Economics  
EC225 Principles of Macroeconomics  
One class in probability and statistics (e.g., QM257, QM258, MA223, SO242)

**III. Purposes or Objectives of the Course**

Students who complete this course should be:

1. familiar with the tools, techniques and methods of empirical economics.
2. able to analyze data using computer applications.
3. familiar with regression methods and other statistical techniques.
4. able to read and assess general interest articles on economics.

**IV. Student Learning Outcomes**

Students who complete this course should be able to:

1. Use a statistical/econometric computer package to estimate an econometric model.
2. Report the results of their work in a literate manner.
3. Interpret regression results in applied economic papers.

**V. Expectations of Students**

- A. Regular class attendance and participation in class discussions and question/answer sessions.
- B. Familiarity with assigned readings.
- C. Satisfactory performance on examinations and other assignments.
- D. A minimum of two hours of outside class work for every hour in class.

**VI. Course Outline**

**Class Hours**

- |   |   |
|---|---|
| A. Introduction to econometrics                       | 2 |
| B. The simple linear regression model                 | 5 |
| C. Interval estimation and hypothesis testing         | 5 |
| D. Prediction, goodness-of-fit and modeling issues    | 5 |
| E. The multiple regression model                      | 5 |
| F. Further inference in the multiple regression model | 5 |

G. Nonlinear relationships	5
H. Heteroskedasticity	4
I. Dynamic models, autocorrelation and forecasting	5
J. Random regressors and moment based estimators	4

## VI. Textbook(s) and/or Other Required Materials or Equipment

Hill, R. Carter, William E. Griffiths and Guay C. Lim, *Principles of Econometrics*, 4<sup>th</sup> edition, Wiley, 2012.

Atkins, Lee C. and R. Carter Hill, *Using Stata For Principles of Econometrics*, 3<sup>rd</sup> edition, Wiley, 2008.

## VII. Basis of Student Evaluation

- A. Examinations 75%
- B. Homework 25%

The weights of evaluation criteria may vary at the discretion of the course instructor.

Grading Scale  
100-90% A  
89-80% B  
79-70% C  
60-60% D  
Below 60% F

## IX. Academic Policy Statement

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to <http://www6.semo.edu/judaffairs/code.html>

## X. Students with Disabilities Statement

If a student has a special need addressed by the **Americans with Disabilities Act (ADA)** and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs. Refer to <http://www.semo.edu/ds>