# COURSE SYLLABUS SOUTHEAST MISSOURI STATE UNIVERSITY

Department: Economics and Finance Course No EC452
Course Title: Econometrics I 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 A. Introduction to econometrics B. The simple linear regression model C. Interval estimation and hypothesis testing D. Prediction, goodness-of-fit and modeling issues E. The multiple regression model 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 <a href="http://www6.semo.edu/judaffairs/code.html">http://www6.semo.edu/judaffairs/code.html</a>

### 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