Course Syllabus
ECON 4761/6761: Applied Macroeconomics
Spring Semester, 2020
3.0 Credit Hours

Instructor: Dr. Jose Joaquin Lopez
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Office: FAB 415

Class meeting time: MW 12:40pm-2:05pm
Office Hours: T-Th, 10:00-11:00pm

Course Overview:
This course covers the theoretical foundations and practice of macroeconomic analytics for understanding policy making and implications for business decision making. The course provides students with a basic understanding of national income accounts, inflation, unemployment, exchange rates and business cycles, with emphasis on the data and statistical measures of macroeconomic outcomes. The formulation of monetary and fiscal policy and implications for business and household decision making is emphasized. Also emphasized will be the development of effective communication of economic statistics and trends.


Course Objectives:

• Understand and distinguish between alternative fundamental macroeconomic models/frameworks.
• Be able to use macroeconomic models to make predictions and analyze policy.
• Demonstrate the ability to use basic time-series techniques to analyze macroeconomic data and preform basic forecasting.
• Understand the importance and use of economic indicators as they relate to economic forecasts and business activity.
• Understand the roles of fiscal and monetary policy in influencing economic activity.
• Be able to effectively communicate information contained in economic statistics and trends.
**Course Materials:**
There is no required textbook. However, you can find the following book to be a useful reference for most of the topics covered in class.

**Macroeconomics 10e**
N. Gregory Mankiw
©2019 | Tenth Edition

There will be extensive use of on-line original source data, like FREDs.

**Location of Course Materials:**
All homework assignments (and other course documents) will be found on the [eCourseware website](http://eCourseware) as they are assigned.

**Computer and Software:**
This course requires the use of specific software programs. To complete some of the assignments, you will need access to a computer that can run specific software programs and access on-line data sources. Tutorials for downloading, installing and using these programs (or using them in university computer labs) will be posted at the appropriate time during the semester.

**Fogelman College: Learning Outcomes for Your Degree**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Link</th>
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<tr>
<td>MA ECON</td>
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**Grading and Evaluation Criteria**

Over the semester, you will have a variety of opportunities to earn points towards your final course letter grade in this course. This section of the syllabus describes the assessed work you will be doing and how letter grades will be computed.
Summary of Graded Activities for 4761 Students

<table>
<thead>
<tr>
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<th>Percentage of grade</th>
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<tr>
<td>First Presentation</td>
<td>25</td>
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<tr>
<td>Homework Assignments</td>
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<tr>
<td>Final Presentation</td>
<td>25</td>
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<tr>
<td>Total</td>
<td>100</td>
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<tr>
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<td>25</td>
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<tr>
<td>Homework Assignments</td>
<td>40</td>
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<tr>
<td>Final Presentation &amp; Report</td>
<td>35</td>
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<tr>
<td>Total</td>
<td>100</td>
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Final Course Grade:

Your final letter grade is based on your overall average, with the weights of each assignment/exam given in the above table. Letter grades are assigned based on the following cutoffs:

96-100………………….. A+
90-(less than) 96………. A
86-(less than) 90……… B+
80-(less than) 86……… B
76-(less than) 80………. C+
70-(less than) 76………. C
66-(less than) 70………. C-
60-(less than) 66………. D
Below 60………………….. F

Course Policies:

E-mail:

All students are required to maintain and access their University of Memphis (@memphis.edu) email account. You will receive all official course correspondence at this email account. Any inability to receive incoming mail in a timely fashion (e.g., not regularly checking your email, having a “full mailbox” condition, etc.) is the student’s responsibility.
Adding / Dropping:

If you have questions about adding or dropping classes, please refer to this page on the Registrar's website.

Academic Integrity:

The University of Memphis has clear codes regarding academic dishonesty and classroom misconduct. Refer to the Student Handbook section on academic misconduct for a discussion of these codes. Note that using a “Solutions Manual” is considered cheating. Should your professor have evidence that using a “Solutions Manual” has occurred, he/she may take steps as described on the campus’ Office of Student Conduct website. If you have any questions about academic integrity or plagiarism, you are strongly encouraged to review the Fogelman College's Website on Academic Integrity.

Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Student Services:

Please access the FCBE Student Services page for information about:

- Students with Disabilities
- Tutoring and other Academic Assistance
- Advising Services for Fogelman Students
- Technical Assistance

Tentative Course Outline:

I. Fundamental Relationships and Tools:
   a. National income accounting
      i. Know how GDP estimates are produced
      ii. Aggregate identities
         1. Income side and Product side Accounting
         2. Value added - as a contribution output
   b. Economic indicators
      i. Interpret the economic indicators as they relate to the economic forecast
      ii. Time series Analysis "basics"
         1. t-notation/statistical significance
         2. Calculating annualized percent change
         3. Stock and Flow relationship
         4. Seasonally adjusted vs. not seasonally adjusted data
   c. Saving Investment relationship
i. Private Saving
ii. Government surplus/deficit
d. Sources of Inflation
e. Measurement of Inflation
   i. Chain Measures - Fixed Weight
   ii. CPI, PPI, Deflators, Employment Cost Index, Indexation, etc.
   iii. Notion of Core Inflation

II. Flow of Funds (U.S. Financial Accounts)
a. History, redesign and organization
b. Structure and sources of data
c. Flow matrix
d. Instrument categories
e. Main data sources:
   i. Government agencies
   ii. National Income and Product Accounts (NIPA)
   iii. Balance of Payments (BOP)
   iv. International Investment Positions (IIP)
   v. Regulatory reports
   vi. Aggregated tax statistics
   vii. Federal Reserve surveys
   viii. Trade associations
   ix. Ratings agencies
f. Integrated macroeconomic accounts

III. Static Models/Frameworks:
a. Basic Model Building Concepts
   i. Expenditure relationships
   ii. Multiplier concepts
b. IS/LM model
   i. Solve for interest rate and level of output
   ii. Fixed Prices vs. Flexible Prices
   iii. Short run vs. Long run
c. Aggregate demand and aggregate supply
d. Aggregate output and production function
e. New Keynesian Macro/DSG

IV. Fiscal Policy:
a. Stabilization policy
b. Balanced budget concepts
c. Static vs. dynamic scoring

V. Inflation Dynamics:
a. Philips curve
b. Natural rate hypothesis
c. Quantity theory of money

VI. Measuring Inflation
a. Agency collecting and reporting
b. Estimating CPI
c. Comparison of CPI measures

VII. Money and Monetary Policy:
   a. Money, banking, and credit
      i. Reserve banking system/money multiplier
   b. Money and credit creation
      i. Reserve banking system/money multiplier
   c. Monetary Policy
   d. Targets and instruments
   e. Traditional vs. Non-traditional monetary tools
      i. Forward guidance
      ii. Quantitative easing
   f. Monetary rules and inflation targeting
      i. Taylor "type" Rules

VIII. (Macro/Finance):
   a. Money market instruments
      i. Fed Funds, Libor, Commercial Paper
   b. Debt instruments
      i. basics of treasuries, corporates, derivatives and structured products
   c. Term structure of interest rates
   d. Various measures of credit spreads
      i. TED, Yield Spread in Leading Economic Indicators
      ii. Understanding of credit rating process
   e. CAPM/Cost of Capital

IX. Dynamic Models and Long-term Growth:
   a. Growth Accounting
   b. Overlapping generations
   c. Life-cycle optimization
   d. Real business cycle
   e. Labor market search

X. Business Cycle Analysis:
   a. NBER (Nat'l Bureau of Economic Research) Business Cycle Dating Committee
      i. Role in Defining the Business Cycle
   b. Definitions of the Business Cycle
   c. Theories of the business cycle
   d. Consumption theories
      i. Consumption and Saving
      ii. Permanent Income Hypothesis
   e. Investment cycle
      i. Investment and inventory theories
      ii. Jorgenson/Tobin Q
   f. Inventory cycle
   g. Asset markets and real-financial linkage
XI. Measuring Employment
   b. Household survey
   c. Payroll survey (Current Employment Statistics)

XII. Productivity
   a. Measures of productivity
      i. Labor productivity
      ii. Multi-factor productivity
   b. Productivity concepts of output
   c. Productivity concepts of inputs
   d. Changes in productivity
   e. Industry labor productivity
   f. Finding the data
XIII. International Trade and Finance
   a. Theory
      i. Exchange rate determination
      ii. Trade flows/balance
      iii. Financial linkages/contagion
      iv. Purchasing Power Parity
   b. Measurement
      i. BEA international accounts
      ii. International Transactions Accounts (ITAs)
          1. Balance of payments accounts
          2. Current account
          3. Financial account
      iii. International Investment Position (IIP)
      iv. Multinational Companies (MNCs)