



ECO3203:
Intermediate Macroeconomics
10526, Section 1, 3 Credit Hours
Department of Economics, College of Arts & Sciences

COURSE SYLLABUS

Last Updated: 1/6/2022

This course is currently under construction. Any significant change to the syllabus will be announced.

Semester: Spring 2022
Class Meeting Days: Mondays and Wednesdays
Class Meeting Time: 2:00 pm to 3:15 pm
Class Meeting Location: CIS 1016
Instructor: Diogo Baerlocher
Office Location: CMC207D
Office Hours: By appointment
Email: baerlocher@usf.edu

I. University Course Description

Determination of income, employment, prices, and interest rates. Aggregate demand and aggregate supply.

II. Course Prerequisites

ECO 2013 (C-) & ECO 3101 & ECO 2052(C-) OR MAC 2233 (C-) OR MAC 2311 (C-)

III. Course Purpose

The main goal of this course is to provide students with a critical perspective of macroeconomic events and tools to understand and propose macroeconomic policies. We use a modern approach where individual behavior determines aggregate variables (microeconomic based). The course focuses on two broad topics: economic growth and business cycles. Economic growth relates to the long-run trend of aggregate production, whereas business cycles are about the fluctuations around the long-run trend.

IV. Student Learning Outcomes

The course follows the textbook in providing specific learning objectives. Below, you can find the most important outcomes students are expected to achieve by the end of the semester:

1. Discuss how microeconomic principles are important in constructing useful macroeconomics models;

2. Use the Solow growth model to analyze the effects of changes in exogenous factors on income per worker, capital per worker, and the economy's growth rate;
3. Construct the real business cycle, explain how it matches the key business cycle facts, and use the model to analyze other problems;
4. Show how government policy – both monetary and fiscal policy – works in the New Keynesian sticky price model

V. Required Texts

- Williamson, Stephen, *Macroeconomics*, 6 ed. Boston, MA: Pearson, 2018
 - The 5th edition should suffice
- Access to spreadsheet software, i.e., Microsoft Excel

VI. Grading Scale

A ≥ 90%	A- ≥ 85%	B+ ≥ 80%	B ≥ 73%	B- ≥ 70%	C+ ≥ 67%
C ≥ 63%	C- ≥ 60%	D+ ≥ 57%	D ≥ 53%	D- ≥ 50%	

This scale is subject to change at the instructor's discretion. Changes can only improve students' outcomes.

VII. Grade Categories and Weights

Assessment	Percent of Final Grade
Midterms 1 & 2	30% (15% each)
Quizzes	30% (Average)
Take-Home Project	20%
Participation	20%
Final (optional)	15% (Replaces the lowest midterm)

VIII. Assignments

- **Quizzes:** Quizzes are composed of essay questions to be answered individually in class. All quizzes are closed-book. Cheat sheets are not allowed. Students can use a calculator with no access to the internet.

There are five quizzes from which three grades count towards the final grade: the best between quizzes 1 & 2, the best between quizzes 3 & 4, and the quiz 5. Quizzes dates are listed below:

Quiz 1: January 19th / Quiz 2: February 2nd / Quiz 3: March 2nd / Quiz 4: March 23rd / Quiz 5: April 20th

Missed Quiz: A grade of zero will be assigned to a missed quiz. Students can make up for a missed quiz using the score in the question related to the quiz's material in the final exam. For example, if the student missed quiz 4 and scored 16 out of 20 in the questions related to module 5 in the final exam, 80% will be assigned to quiz 4.

- **Take-Home Project:** The project is composed of essay questions focusing on data manipulation and interpretation. Students will be required to work with spreadsheet software (i.e., Microsoft Excel) or statistical software (i.e., R). Students are allowed (and encouraged) to work in groups of up to four members. The first version of the project is due on February 28th. The first version is not graded; however, initial feedback will be provided. The final version is due on April 18th. Students must upload their projects as a pdf file on Canvas. *Late assignments receive a penalty of 15% per day.*
- **Participation:** Participation will be measured in the discussions at the beginning of each module. In the first class of each module, students will be asked to discuss related questions in groups and write down short answers. Students are allowed to miss two out of the seven discussions. After that, each missed discussion implies a 4% penalty in the final grade.
- **Midterms and Final:** Midterms and the final are in-class exams composed of essay/mathematical questions. Questions are similar to the questions in the quizzes. All exams are individual and closed-book. Cheat sheets are not allowed. Students can use a calculator with no access to the internet. Midterms are non-cumulative, whereas the final is cumulative. The first midterm is on February 16th, and the second is on April 6th. The final exam is on May 2nd from 12:30pm to 2:30.

Missed midterm: A grade of zero will be assigned to a missed midterm. Students can make up for a missed midterm using the final exam's score.

IX. Grade Dissemination

You can access your scores at any time using "Grades" in Canvas.

X. Course Schedule

Module	Topics and Learning Objectives
<p>Module 1 (Jan 10 / Jan 19)</p> <p>No class on Jan 17 Quiz 1: Jan 19</p>	<p>What is Macroeconomics and Micro Review</p> <ol style="list-style-type: none"> 1. <i>What is Macroeconomics? (Chapter 1)</i> <ul style="list-style-type: none"> • State the two focuses of study in macroeconomics, the key differences between microeconomics and macroeconomics, and the similarities between microeconomics and macroeconomics. • Explain the key features of trend growth and deviations from trend in per capita gross domestic product in the United States from 1900 to 2014. • Discuss how microeconomic principles are important in constructing useful macroeconomics models. 2. <i>The Representative Consumer (Chapter 4)</i> <ul style="list-style-type: none"> • List the properties of the representative consumer's preferences, and explain why it is useful to assume these properties. • Construct the representative consumer's budget constraint and show how the consumer optimizes 3. <i>The Representative Firm (Chapter 4)</i> <ul style="list-style-type: none"> • List the properties of the production function, and explain why it is useful to assume these properties and show how the representative firm optimizes given its production technology
<p>Module 2 (Jan 24 / Feb 2)</p> <p>Quiz 2: Feb 2</p>	<p>The Long-run: Solow and the Accounting</p> <ol style="list-style-type: none"> 1. <i>The Solow Growth Model (Chapter 7)</i> <ul style="list-style-type: none"> • Construct the competitive equilibrium in the Solow growth model. • Use the Solow growth model to analyze the effects of changes in exogenous factors on income per worker, capital per worker, and the economy's growth rate. 2. <i>Growth Accounting (Chapter 7)</i> <ul style="list-style-type: none"> • Determine the Solow residual and growth rates in real GDP, capital stock, employment, and the Solow residual from data on real GDP, capital stock, and employment.
<p>Module 3 (Feb 7 /Feb 16)</p> <p>Midterm 1: Feb 16</p>	<p>Many Markets: Labor + Goods</p> <ol style="list-style-type: none"> 1. <i>Labor Market (Chapter 4)</i> <ul style="list-style-type: none"> • Derive the supply of labor from consumer's optimal choice • Derive the demand for labor from firm's optimal choice 2. <i>Competitive equilibrium (Chapter 5)</i> <ul style="list-style-type: none"> • Define and construct a competitive equilibrium for the closed-economy one-period macroeconomic (CEOP) model. • Show that the competitive equilibrium and the Pareto optimum for the CEOP model are the same thing. • Analyze and interpret the effects of changes in exogenous variables in the CEOP model.

<p>Module 4 (Feb 21 / Mar 2)</p> <p>Quiz 3: Mar 2</p> <p>Project First Version: Feb 28</p>	<p>More Markets: Thinking about the future</p> <ol style="list-style-type: none"> 1. <i>Aggregate Consumption (Chapter 9)</i> <ul style="list-style-type: none"> • Construct a consumer's lifetime budget constraint and preferences in the two-period model, and solve his or her optimization problem. • Show how the consumer responds to changes in his or her current income, future income, and the market real interest rate. • Construct the government's present-value budget constraint. • Show how a competitive equilibrium is constructed in the two-period model. 2. <i>Ricardian Equivalence (Chapters 9)</i> <ul style="list-style-type: none"> • Explain the Ricardian Equivalence Theorem. • Discuss how the Ricardian Equivalence Theorem helps us understand the burden of the government debt.
<p>Module 5 (Mar 7 / Mar 23)</p> <p>Spring Break: Mar 14 – Mar 20</p> <p>Quiz 4: Mar 23</p>	<p>Real Macroeconomy</p> <ol style="list-style-type: none"> 1. <i>Aggregate Investment (Chapter 11)</i> <ul style="list-style-type: none"> • Show how the firm's investment decision is structured, and determine how changes in the environment faced by the firm affect investment. 2. <i>The Real Intertemporal Model (Chapter 11)</i> <ul style="list-style-type: none"> • Explain the decisions made by the representative consumer in the real intertemporal model. • Explain the decisions made by the representative firm in the real intertemporal model. • Construct the output supply curve. • Construct the output demand curve. • Show how a competitive equilibrium is determined in the real intertemporal model.
<p>Module 6 (Mar 28 / Apr 6)</p> <p>Midterm 2: Apr 6</p>	<p>A Market for Money?</p> <ol style="list-style-type: none"> 1. <i>Money (Chapter 12)</i> <ul style="list-style-type: none"> • Explain the functions of money, and how money is measured. • Construct the monetary intertemporal model. • Derive the Fisher relation. 2. <i>Money Neutrality & Monetary Policy (Chapter 12)</i> <ul style="list-style-type: none"> • Construct a competitive equilibrium in the monetary intertemporal model, and carry out equilibrium experiments using the model. • Demonstrate that money is neutral in the monetary intertemporal model. • List the factors that can shift money demand, and show how a shift in money demand affects economic variables in the monetary intertemporal model. • Show how conventional monetary policy is ineffective in a liquidity trap, and explain unconventional monetary policies.

<p>Module 7 (Apr 4 / Apr 20)</p> <p>Quiz 5: Apr 20</p> <p>Project Final Version: Apr 18</p>	<p>Theories of Economic Fluctuations</p> <ol style="list-style-type: none"> <i>The Real Business Cycle Model (Chapters 3 & 13)</i> <ul style="list-style-type: none"> Construct the real business cycle, explain how it matches the key business cycle facts, and use the model to analyze other problems. Show how the real business cycle model could be consistent with the observed comovements of money and output. Discuss criticisms of the real business cycle model. <i>The New-Keynesian Model (Chapter 14)</i> <ul style="list-style-type: none"> Construct the New Keynesian model with sticky prices. Demonstrate that money is not neutral in the New Keynesian model. Show how government policy – both monetary and fiscal policy – works in the New Keynesian sticky price model. Show the implications of the New Keynesian model for what we should see in the data, assuming optimal monetary policy. Construct a liquidity trap equilibrium in the New Keynesian model, and show how negative interest rate policy works. Explain the criticisms of New Keynesian models.
<p>Last Week</p>	<ol style="list-style-type: none"> <i>Special topic or extra class if needed</i> <i>Wrap up</i>
<p>Final Exam</p>	<p>May 2nd (12:30pm - 2:30pm)</p>

* Note: The Schedule is subject to revision

XI. Standard University Policies

Policies about disability access, religious observances, academic grievances, academic integrity and misconduct, academic continuity, food insecurity, and sexual harassment are governed by a central set of policies that apply to all classes at USF. These may be accessed at: <https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx>

XII. Covid-19 Procedures

All students must comply with university policies and posted signs regarding COVID-19 mitigation measures, including wearing face coverings and maintaining social distancing during in-person classes. Failure to do so may result in dismissal from class, referral to the Office of Student Conduct and Ethical Development, and possible removal from campus.

Additional details are available on the University's Core Syllabus Policy Statements page: <https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx>

XIII. Course Policies: Grades (as applicable)

All policies related to grading are discussed in sections VI to IX.

XIV. Course Policies: Technology and Media

Email: The preferred mean of communication between the students and the instructor is the Canvas Inbox message. The instructor checks its inbox once a day during weekdays. Therefore, keep in mind that it may take up to 24hrs to receive a reply.

Canvas: This course will be offered via USF's learning management system (LMS), Canvas. If you need help learning how to perform various tasks related to this course or other courses being offered in Canvas, please view the following videos or consult the Canvas help guides. You may also contact USF's IT department at (813) 974-1222 or help@usf.edu.

Remote Learning: Teams lecture streaming and/or video and audio recordings of class lectures may be part of the classroom activity. The video and audio recordings are used for educational use/purposes and only may be made available to all students presently enrolled in the class. For purposes where the recordings will be used in future class sessions/lectures, any type of identifying information will be adequately removed.

XV. Course Policies: Moving online (if necessary)

External circumstances may force us to have the course in an online format. If that is the case, students will follow the pre-determined order on completing assignments. Namely, Pre-lecture quizzes first, then watch lectures, then complete graded quizzes. Deadlines will become flexible within a week. Exams should be answered only during a pre-determined one hour and 30 minutes time interval. The exams will be open-book but still individual. Students found communicating with other students and/or websites that enable cheating, such as course hero, will receive a zero and will be penalized according to the academic integrity policy.

XVI. Course Policies: Student Expectations (as applicable)

Course Hero Policy: The [USF Policy on Academic Integrity](#) specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to CourseHero.com – any use of this website (including uploading materials) constitutes a violation of the academic integrity policy.

End of Semester Student Evaluations: All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be

made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Turnitin.com: In this course, turnitin.com will be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>.

XVII. Important Dates to Remember

Add a short statement that describes that all the dates and assignments are tentative, and can be changed at the discretion of the professor. Be sure to get the newest dates from the Registrar: <https://www.usf.edu/registrar/calendars/>

Drop/Add Deadline:	Friday, Jan 14th 2022
MLK holiday	Monday, Jan 17 th 2022
Spring Break:	Monday, Mar 14th – Sunday, Mar 20th 2022
Withdrawal Deadline:	Saturday, Mar 26th 2022